# the MODERN HOSPITAL

VOLUME 46 APRIL 1936 NUMBER 4

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## For April, 1936



## Just in Passing—

PHYSICIANS who think the medical profession is overcrowded may read with amazement a recent article in the *Reader's Digest* entitled "Don't Be a Lawyer." The anonymous author declares that the competition is terrific and legal ability is no longer a prerequisite to success. In his Eastern city of 100,000, "wiles have so boldly supplanted ethics that we have had in recent swift succession a receivership scandal, an ambulance chasing scandal and a jury fixing scandal." Hospital administrators will not be surprised to learn of these difficulties. For some years ambulance chasers have made uneasy the sleep of the administrator. The situation in one city, Atlanta, Ga., has apparently been cleaned up, or at least partially so, through the efforts of a vigorous prosecuting attorney. Next month he will describe for readers of The MODERN HOSPITAL the methods used.

IN THIS month's issue is a comprehensive article on preventing explosions in the operating room. Next month the author, Victor B. Phillips, will present a suggested code covering the subject. Many hospitals will wish to review their standing orders on the subject in the light of this code.

THERE appears to be some difference of opinion regarding the advisability of undertaking various business enterprises in hospitals. Flower shops, drug stores, gift shops, restaurant service and many other types of business activity


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# CONTENTS

have been tried by different hospitals at different times. Some of them have been financially successful. Dr. J. J. Golub of New York challenges the whole idea. He believes it is incompatible with hospital ideals. His stimulating discussion of this perplexing problem will be one of the articles presented next month.

LAST month Senator Dickinson called for a national program for adequate hospital service in rural areas. Next month M. L. Wilson, assistant secretary of agriculture, will describe the various steps that have been taken by his department to improve rural health service. Special emphasis is placed by the Department of Agriculture on preventive services.

SOME hospitals spend much time and effort to obtain endowments. How many have worked out effective and practical methods of controlling and safeguarding these endowments? Study of this problem by Dr. John C. Mackenzie has resulted in an article with specific suggestions for handling endowments. It will appear next month.

WHAT is this new nursing school curriculum that seems to be worrying so many administrators? Is it a rigid program for all types of schools? Will it mean that all small hospital schools have to be closed? Will it be forced down the throats of hospitals by state legislatures? These are serious questions. Anna D. Wolf of New York Hospital, a member of the curriculum committee of the National League of Nursing Education, will answer these and other questions next month.

DIETITIANS are expected nowadays to be good purchasers, efficient administrators, excellent teachers, firstrate cooks, and, on occasion, even ingenious mechanics. Now comes Lulu Graves to speak of the dietitian as sanitarian. Will the demands on the dietitian never stop? Probably not. Her responsibility is so large that she must continue to grow as the years go on if she expects to meet it.


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MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858

[1] Griffith, H. R.: Cyclopropane Anesthesia: A clinical record of 350 administrations, Canad. M. Assn. J., 31:157 (Aug.), 1934. *Registered U. S. Pat. Off.

FLASHES FROM THIS ISSUE:

"Nursing, like medicine, has available at least one measure of the effectiveness of its schools." *Page 55.*

"The rooms are designed to permit their use as oxygen therapy rooms with automatic control of the humidity and temperature, as pollenfree and dustfree rooms, as air conditioned rooms under the same conditions, or as ordinary patients' rooms." *Page 64.*

"A greater responsibility for supplying the board of trustees with a clear understanding of the professional work that is carried on in the hospital rests upon the medical staff of a small hospital than upon the staff of a large hospital." *Page 58.*

"The oldest, cheapest, and one of the best forms of first aid fire extinguishing equipment is the water pail." *Page 75.*

"An analysis of each pay roll position was made and definite functions and duties were assigned to each individual and a card recording these functions and duties was established." *Page 67.*

"Proper safeguarding against the anesthesia explosion hazard calls for a full understanding of the subject and of the principles involved and for ceaseless vigilance on the part of surgical personnel." *Page 81.*

"While the supreme importance of the clinical record is admitted everywhere by hospital staffs, the greatest difficulty in a small hospital is to obtain cooperation from the staff in keeping good records." *Page 58.*

"It is obvious that there can be no adequate reason for continuing many of the schools which are obviously bad or schools that cannot comply with the most meager of qualifications." *Page 56.*

"As all patients who have ever reported to this clinic have been followed until death or discharge, follow-up has been one hundred per cent in spite of the lack of a social worker in the beginning." *Page 69.*

"When the radiologist states that the only way he can gain professional recognition is to place his services on an individual fee basis, I cannot agree with him." *Page 68.*

"Where it is temporarily impossible for financial reasons to install an air conditioning system the next best thing from the standpoint of the anesthesia explosion hazard is to install humidifiers." *Page 88.*


# THE MODERN HOSPITAL

THE MODERN HOSPITAL PUBLISHING CO., INC.
OTHO F. BALL, M.D., *President*
919 NORTH MICHIGAN, CHICAGO, ILLINOIS

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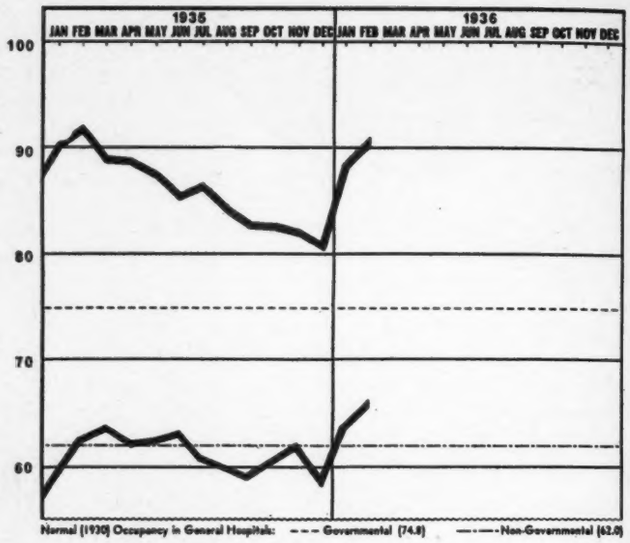
# The Hospital Barometer

The increase in occupancy in voluntary hospitals continued in February, the tentative figures reaching the highest point attained since this compilation was begun in 1933. The figure for this February (65.9) is 3.4 points above February of last year and 7.5 points above February of 1934. Occupancy in government hospitals, on the other hand, although still very high is slightly below the level of last February. Although the occupancy of the voluntary hospitals has been rising steadily for two years, each month being higher than the corresponding month of the previous year, the decrease in the occupancy of government hospitals has not yet been correspondingly large. Evidently a larger number of people are utilizing hospital service.

Hospital building activity continued at an active pace during the period from February 24 to March 23. Forty-three new projects were reported involving a total cost of $7,432,450. Thirty of these were additions to existing hospitals and costs of $4,526,778 were reported for twenty-nine of them. There were seven new hospitals planned at a cost of $987,000, three nurses' homes which are expected to cost $1,673,000 and three alterations to hospitals which will cost $245,670. The total of nearly $7,500,000 reported last month may be compared with $2,400,000 for the comparable period of 1935 and $9,600,000 in 1934.

The first three months of 1936 show a definite upswing in hospital building. In 1934 a total of 106 new hospital building projects were reported in the three-month period and costs of $19,406,700 were given for 96 of the projects. Last year the three-month total dropped to 55 projects with costs for 40 of them totaling $8,698,000. This year 134 projects have been reported and costs for 129 of them total $26,423,000.

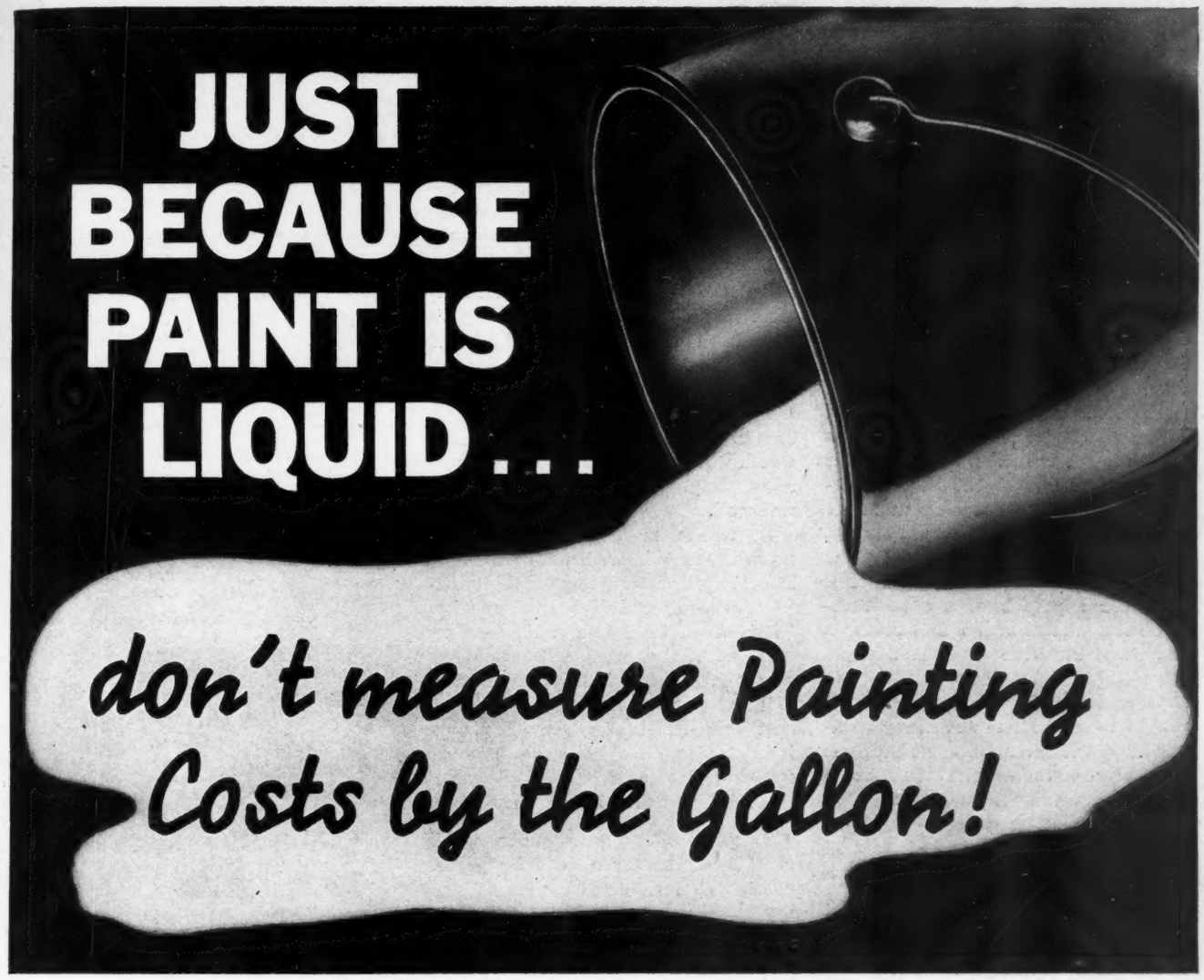



The general wholesale price index of the *New York Journal of Commerce* declined slightly during the last week in February and then remained unchanged during the first three weeks of March. Grain and food prices however dropped appreciably, the former moving from 83.2 on February 24 to 78.3 on March 23 while the latter fell from 82.0 to 77.2 during the same period (1927-29=100). Fuel prices dropped slightly, textiles remained unchanged but building materials began their spring advance. Drugs and fine chemicals, according to the index of the *Oil, Paint and Drug Reporter* maintained practically the same prices.

## Occupancy Figures of Hospitals in Various States and Cities

| Type and Place | Census Data on Reporting Hospitals[1] | | 1935 | | | | | | | | | | | 1936 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hospitals | Beds[2] | Feb. | March | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. |
| Nongovernmental | | | | | | | | | | | | | | | |
| New York City[3] | 68 | 15,194 | 72.0 | 74.0 | 70.0 | 75.0 | 72.0 | 66.0 | 62.0 | 62.0 | 67.0 | 69.0 | 66.0 | 66.0* | 66.0* |
| New Jersey | 58 | 9,772 | 65.0 | 66.0 | 65.0 | 66.0 | 64.0 | 62.0 | 60.0 | 60.0 | 62.0 | 63.0 | 62.0 | 62.0* | 62.0* |
| Washington, D. C. | 9 | 1,790 | 71.8 | 70.5 | 69.8 | 68.7 | 70.6 | 68.2 | 62.0 | 63.9 | 68.3 | 68.3 | 63.0 | 70.8 | 70.8* |
| N. and S. Carolina | 103 | 5,968 | 63.1 | 64.9 | 62.3 | 64.6 | 66.8 | 65.7 | 66.3 | 65.7 | 64.4 | 63.3 | 59.1 | 63.9 | 71.4 |
| New Orleans | 7 | 1,146 | 49.5 | 50.1 | 46.8 | 50.9 | 58.3 | 57.1 | 58.2 | 55.1 | 53.3 | 55.8 | 50.8 | 58.3 | 56.9 |
| San Francisco | 16 | 3,081 | 68.2 | 67.4 | 69.5 | 66.4 | 67.4 | 62.4 | 63.9 | 63.9 | 66.7 | 70.2 | 65.2 | 71.9 | 76.0 |
| St. Paul | 7 | 838 | 53.6 | 55.9 | 52.3 | 48.8 | 51.7 | 46.4 | 49.1 | 48.5 | 46.6 | 50.7 | 49.0 | 56.7 | 57.2 |
| Chicago | 23 | 4,032 | 57.3 | 61.9 | 58.8 | 55.9 | 54.7 | 54.5 | 53.8 | 53.6 | 54.7 | 54.9 | 52.8 | 56.5 | 61.8 |
| Cleveland | 6 | 909 | 62.0 | 62.0 | 63.6 | 65.7 | 63.4 | 63.2 | 63.4 | 58.5 | 61.7 | 62.3 | 60.6 | 66.5 | 71.0* |
| Total[4] | 297 | 42,730 | 62.5 | 63.6 | 62.1 | 62.4 | 63.2 | 60.6 | 59.9 | 59.0 | 60.5 | 61.9 | 58.7 | 63.6* | 65.9* |
| Governmental | | | | | | | | | | | | | | | |
| New York City | 17 | 12,042 | 100.6 | 103.2 | 104.6 | 105.6 | 100.4 | 103.6 | 93.2 | 91.7 | 85.8 | 86.5 | 87.3 | 95.1 | 100.2 |
| New Jersey | 6 | 2,122 | 86.0 | 84.0 | 85.0 | 84.0 | 77.0 | 79.0 | 79.0 | 76.0 | 84.0 | 78.0 | 76.0 | 76.0* | 76.0* |
| Washington, D. C. | 2 | 1,596 | 95.5 | 76.3 | 72.7 | 69.4 | 67.4 | 68.4 | 69.5 | 62.9 | 60.4 | 60.4 | 62.9 | 71.4 | 71.4* |
| N. and S. Carolina | 13 | 1,256 | 65.7 | 68.5 | 65.8 | 68.6 | 68.1 | 68.7 | 72.3 | 68.0 | 66.9 | 65.4 | 63.8 | 71.4 | 79.5 |
| New Orleans | 2 | 2,227 | 145.4 | 130.4 | 130.8 | 132.8 | 138.8 | 149.0 | 143.1 | 140.9 | 138.5 | 137.4 | 127.8 | 130.0* | 141.3 |
| San Francisco | 3 | 2,255 | 79.1 | 77.1 | 80.3 | 77.3 | 72.3 | 72.0 | 71.3 | 79.5 | 76.8 | 79.1 | 81.1 | 83.5 | 83.4 |
| St. Paul | 1 | 850 | 78.7 | 77.8 | 75.8 | 75.2 | 74.5 | 67.3 | 63.4 | 61.5 | 65.0 | 68.6 | 66.6 | 94.9 | 85.4 |
| Chicago | 1 | 3,330 | 83.4 | 93.9 | 84.2 | 86.0 | 84.5 | 83.5 | 80.5 | 80.4 | 81.7 | 80.2 | 79.5 | 83.3 | 86.2 |
| Total[4] | 45 | 25,678 | 91.8 | 88.9 | 88.7 | 87.4 | 85.4 | 86.4 | 84.0 | 82.6 | 82.4 | 81.9 | 80.6 | 88.2* | 90.4* |

[1]Insofar as possible hospitals for tuberculous and mental patients are excluded as well as hospital departments of jails and other institutions. The census data are for the most recent month. [2]Including bassinets, in most instances. [3]Includes only general hospitals. [4]The occupancy totals are unweighted averages. These averages are used in the chart above. *Preliminary report.

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# BARRELED SUNLIGHT

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# The Editor Talks It Over

• Medical specialties generate personalities of their own or else certain personalities choose definite specialties. Not only by their works but often by their appearance shall you know them.

The superintendent has a fine opportunity for such a study. From his window he observes the bustling arrival of the successful surgeon in his shining new car. He mentally notes that recently this staff member has treated the town's wealthy man. The measured approach of the tired obstetrician, the clinician and studious teacher of medicine with his classical beige bag and the laryngologist who appears strangely undressed without a head mirror, all are mentally catalogued by the executive as he observes the arrival of the hospital staff. Some there are whose visits are of such regularity that he may even set his watch thereby, others as uncertain in their movements as a mixed local on a branch railroad. What, he wonders, is the measure of staff service and success and why are clinicians less temperamental than surgeons?

• The healing practices of the old time physician have been altered by the touch of a newer age. And yet, the barber pole of the surgeon of years ago still remains as the symbol of the tonsorial artist of today. Live leeches are to be procured with great difficulty and the newer generation of physicians handle them clumsily and rarely require their assistance in reducing inflammation. The wet cupping block with its multiple spring knives has become a museum specimen. Bleeding is reserved for acute heart failure or excessive high blood pressure. While these have gone the way of the silk hat and the horse and buggy of the early practitioner one wonders whether such practices do not have something to offer to today's medicine.

• Under the title "The Ingenious Dr. Franklin," Nathan Goodman presents a collection of the scientific letters of the remarkable man who signed himself Poor Richard. Besides the interest which Benjamin Franklin showed in securing the charter for the old Pennsylvania Hospital, his activities in behalf of his fellow men were almost too varied to recount. He gave his attention to the cause and cure of smoking chimneys, to the organization of the first fire company in the United States, to the paving of streets and to the inauguration of the night watch which at regular intervals reassured sleeping Philadelphians that all was well.

In things medical, Franklin was much interested. He invented the first bifocal glasses, he wrote on the treatment of lead paralysis with electricity, he discussed the nature of the common cold with the wise but somewhat overly self-assured Benjamin Rush. With almost uncanny vision he forecast both aerial navigation and daylight saving. He knew much about many subjects. His inquisitiveness continually spurred him to know more.

• Hospital odors represent a queer composite. To those who rarely frequent institutional corridors and wards the smell of iodoform, ether or of antiseptics may be objectionable. Dr. Oliver Wendell Holmes once described an assistant who lived so much in the atmosphere of rhubarb and ipecac that by merely passing through a patient's room he emanated from his person a liberal therapeutic dose of these drugs. It is curious that hospital architects and executives do not more routinely remove from public corridors the morning bedpan parade with all of its disagreeable features. But just as the printer is oblivious to the odor of his ink, so hospital workers often appear to be unaware of the need for a pleasant deodorizer.

• Apropos of the subject of odors, the young physician might well be reminded that to worship at the shrine of Æsculapius instead of at that of Bacchus is the surest way to success. When the odor of alcohol emanates from the pulmonary expirations of the doctor, the patient never minimizes the probable effect of the ingestion of this drug on his cerebrating power. Doctor Holmes again teaches a worthwhile lesson to hospital interns when he cautions the young doctor against entering the room of "suffering loveliness carrying with him reminiscences of an extinguished meerschaum." The insistence upon the proper dress and decorum on the part of interns while with patients is as wise now as it was a half century ago.

• A correspondent writes us of the little hothouse in connection with his hospital. A few old boards furnished the framework, a lot of out-of-date x-ray plates the glass, and a little labor and ingenuity soon had the building erected. He states that in this rude shelter he has propagated 25,000 plants which will be used to decorate his ground for this year. The stems of all roses sent to the hospital have been planted and in this way he has a large assortment of bushes which will produce roses throughout the summer months. Ferns and foliage plants have also been propagated and these are used for the decoration of the wards and bedside tables of those patients who have not received flowers from friends. Let us pass this good idea on to others.

• Pasteur provided the open sesame to a great new world in which dwelt infinitesimal disease producing organisms. If he had contributed nothing else to the world than the demonstration of the life-saving possibilities of his treatment for rabies, his name would have been emblazoned on the world's scientific roll of honor.

Recently throughout the country and particularly in the East, a number of cases of human hydrophobia have occurred. During the past few months many hundreds of dogs have been afflicted. In the great majority of instances persons suffering with dog bite have received the Pasteur treatment. Formerly requiring twenty-eight, then twenty-one and now fourteen daily injections, this treatment is highly effective. During the years 1908 and 1909 at the Pasteur Institute in Paris, 991 cases of dog bite were treated with but two deaths.

Dog bite victims often go first to the hospital. To treat such a wound locally and not follow with the administration of the Pasteur treatment is to neglect the hospital's plain duty. Even though this treatment is expensive the hospital must not fail to use this effective public health measure.

# Looking Forward

## A Research Center

EVERY hospital to a greater or lesser degree desires to pursue some research problem. In most institutions, however, such aspirations, if realized, spell the squandering of money and the addition of no really new information on the cause and the treatment of disease. Good research requires much money and the services of highly trained technicians. Moreover, the average visiting physician, although yearning to study some new problem, possesses neither the time nor the skill to perform really highgrade work.

The board of trustees should support to the greatest degree any true investigative urge which becomes evident in the visiting staff. But to require that investigative studies be originated by part-time staff members is sure to result in futile and expensive efforts to discover new and startling truths. Laudable as are the motives underlying such efforts, it is probably wiser for a few especially well equipped institutions to devote time and money to research while the great majority stick to their allotted task of treating the sick. There must lie the major emphasis in the rank and file of institutions.

To direct attention away from the importance of careful clinical study of the patient by too strongly stressing the laboratory viewpoint is unwise. Highly endowed and expertly staffed research institutes require but few hospital beds to accommodate the specialized type of patients under study. They scan a restricted bodily field intensively. Good ward care on the other hand requires that the whole patient be studied, even his social, economic and hereditary backgrounds being sketched to assist in this survey. To expend the community's money in the pursuit of ineffective, poorly conceived and carelessly supervised research is to divert from the bed of the sick man assistance to which he has a right.

While the scientific zeal of good clinicians should not be dampened, the board of trustees will do well to consider carefully whether these physicians also have the training, the full concept of the problem to be investigated and the knowledge of what others have done, before an appropriation is made to meet their requests. Poor research is worse than none at all. False conclusions are dangerous. Few are research-minded and still fewer can pursue the practice of clinical medicine so as to earn a livelihood and at the same time doggedly follow the trail of a scientific problem until success crowns their efforts.

Let most hospitals stick to their lasts. Let those which can, delve ever more deeply into the mysteries of medicine.

## The Remaining Forty Cents

A SIMPLE problem in arithmetic confronts the hospital. How can it give away sixty cents of each maintenance dollar and still furnish efficient service with the remaining forty cents? "Impossible," exclaims the public, "such a situation cannot exist." Such, however, is too frequently the case.

A close inspection of the sources of the hospital's income should be informative. From 1919 to 1927, in many institutions, the income derived from endowments steadily increased, often reaching 20 per cent of the total hospital earnings. Generosity to the hospital was then the custom. In a few instances, the voluntary hospital earned as much as 85 per cent of its maintenance costs. Exclusive of community chest contributions during these pre-depression years, institutions frequently earned sixty-five to seventy-five cents of every dollar spent. In a few instances, earned income plus endowment and other receipts, equaled or even slightly exceeded expenses. But since 1928 all three sources of income have proved inadequate. It has been necessary to meet deficits from endowment funds which procedure has proved embarrassing because of impoverished receipts from even this source.

Many hospitals today must be content to earn less than one-half of their maintenance dollar. While earnings from private and semiprivate beds have increased in the last year, it is probable that many years will elapse before endowment and community chest incomes will approximate

those of a decade ago. If and when government responsibility is assumed for the care of the indigent in voluntary hospitals, this impossible and wholly unjustifiable financial dilemma will be solved.

## Buying Staff Positions

A HOSPITAL staff position should not represent a commodity offered to the highest bidder. Nor should such an appointment be employed as a pawn to be awarded to the most astute medical politician.

Few will seriously disagree with these statements. Many may be mildly surprised and shocked that there should appear any need for their utterance. Nevertheless too often other yardsticks than medical or surgical competence are employed to measure the contribution which the physician applying for a staff position may render to the hospital. Sometimes he who will make the largest cash donation is appointed. Just as frequently social position or political or financial prominence in the community are deciding factors. To stoop to such brazen commercialism in the selection of surgeons or physicians is to discourage scientific zeal on the staff's part and to work untold harm to patients and to the reputation of the hospital.

True, the board of trustees must look to enlarging the hospital clientele in the selection of the staff. Just as certainly medical merit will attract private patients. Inevitably the playing of medical politics and the bartering of staff promotions will wreck morale and in the end defeat its own purpose — the increasing of the hospital's income.

## A Splendid Project

TUBERCULOSIS, cancer, heart disease, diabetes and pernicious anemia have been subjected to many searching investigations. Some of these studies have been highly productive—notably in the case of diabetes and pernicious anemia. But inquiries as to the etiology, prevention and cure of mental disease have been conspicuous by their lack of success and lack of even reasonable exhaustiveness. It is heartening, therefore, to note that the National Committee for Mental Hygiene, through a grant from the Supreme Council of Scottish Rite Masons, has recently undertaken an investigation into the cause and cure, if any, of dementia praecox.

Precocious dementia, as its name implies, is a disease of early life. Each year it deprives from thirty to forty thousand young men and women of their usefulness. Unless checked, it condemns its victims to lifelong institutionalism.

More than one-half of all the hospital beds in the United States are occupied by mental patients and of these almost 50 per cent are classified as dementia praecox cases. This type of mental illness constitutes today the greatest single institutional problem in this country, if not in the whole world. However, since its recovery rate is one of the lowest of all types of psychosis, as each year passes there is a gradual accumulation of these patients in mental hospitals.

Mental hygiene clinics are increasing in number and in effectiveness in handling these cases. Perhaps it is this fact which has stimulated investigators to press forward in their endeavors to learn more concerning this mysterious—this devastating—disease. Because of the immense annual expense of mental disease, and even more because of the misery which it entails, the hospital field will applaud this new attempt to bring its chief offender—the dementia of the young—under the control of the physician.

## Time to Retire

HOSPITAL rules rather commonly require the retirement from active service of the surgeon and physician upon the attainment of the age of sixty-five. Board members are often placed upon the inactive list after a decade's service. Executives, however, are less frequently affected by such a rule. Even when a retirement age has been set, one sometimes observes the exercise of a harmful sentimentalism which prevents the application of this effective method of maintaining the virility and progressiveness of the hospital personnel.

To elevate a staff member to an emeritus or consulting status is not a cruel ruling of a heartless board. It is an institutional life-saving act. Only by striving continually to bring into the staff or administrative organization young blood can the hospital avoid scientific complacency and the hardening of institutional arteries.

Nor should the long and faithful service of physicians, executives or even orderlies and engineers be summarily forgotten when the retirement age is reached. Pensions, perhaps less responsible and physically exacting duties at a reduced salary, the election to the emeritus or consulting staff for physicians are but a few suggestions which may guarantee fair play to the

hospital worker approaching three score and ten. The welfare of the institution and its patients must take precedence over the wishes of the employee of whatever type he may be. Reward long service surely, but not through foolish sentiment, at the expense of hospital progress.

## No Place for Class Distinctions

THE hospital board of trustees should represent all interests in the community which the institution serves. Membership should symbolize the fact that the service to the sick knows no racial, religious or social barriers.

The hospital truly endeavoring to render this cosmopolitan service should abhor class distinction. Twelve industrialists or clergymen or fraternalists cannot speak for the many other businesses or professions from which the institution asks and expects support. Nor should the ability to contribute to the hospital's maintenance serve as a criterion of eligibility for a board appointment.

In a manufacturing city, labor might well expect a place on the board of the institution which it supports. An educationalist, an attorney, an investment banker, the president of a women's club, one or more industrialists, a representative of the town's oldest and most prominent family might serve as other suggestions for board appointments. To perpetuate the influence of any family by restoring to nepotism is an error. Let the hospital serve equally all classes and by the same token let all classes serve the hospital.

## The Doctor Comprehends

THE furore incident to the release of the majority and minority reports of the Committee on the Costs of Medical Care has almost subsided. Less often now does one hear the reverberating arguments of those who oppose or approve. The ghost of socialized medicine stalks less fearsomely than it did a few months ago and group hospitalization appears to grow in favor daily. An increasing number of doctors understand its advantages and intelligently discount reports as to its dangers. A period of sanity has been reached which enables physicians to discuss calmly with laymen measures that appear best for the community's welfare.

Undoubtedly one element which has brought about these changes has been an encouraging increase in the doctor's income. The physician no longer is gripped by fear of destitution or suspicion that his fellow men are deliberately seeking to destroy him. Indeed, it has been rather definitely shown that group hospitalization or some application of this plan actually increases rather than diminishes the doctor's income. The three parties at interest, putting suspicion and self-seeking aside, should now return to the consideration of the only really important matter—the community's health interests.

The public—the doctor—the hospital—these three. No plan can succeed without the contribution and cooperation of each. None should be proposed without the best interests of each being served thereby. The hospital council with each represented is the logical medium through which to work.

## Diagnosis *Versus* Mechanics

THE modern skilled surgeon should be three-fourths diagnostician and one-fourth mechanic. Such is the frank opinion of many. Surely to secure the manual dexterity necessary to incision and suturing offers comparatively little difficulty. To know when and where to incise and when to withhold the scalpel is of greater importance.

Patients entering the surgical department directly from their homes are too often not subjected to the close diagnostic scrutiny they deserve. To remedy this apparently uncontrollable tendency to haste, a diagnostic ward is conducted in some hospitals to which all nonemergent surgical cases are admitted for study. Here apart from the hurried atmosphere of a surgical department a calm and careful search for the nature of the ailment is made.

One executive, himself a surgeon, in discussing this plan made the startling statement that a patient entering such a ward for study had but one-tenth the chance of undergoing major surgery of one admitted directly to the surgical department. Surely this is an incrimination of the present system and a strong argument for better diagnostic work by the surgeon.

As the importance of the plan is properly stressed, exploratory laparotomies will surely diminish in number. Evidences of a slothful indolent surgeon as they sometimes are, an excess of exploratory operations should cause the administrator to ask the chief of staff the reason therefor. Moreover, when the pathologist too often finds normal tissue in appendical specimens sent to him for examination, the same course should be followed.

# This Children's Home Has Been

By L. M. FRANKLIN, York & Sawyer, Architects, New York City

A BEAUTIFUL country estate in Leetsdale, comprising many acres in the wooded section of Pennsylvania, furnishes the background for the D. T. Watson Home for Crippled Children. In this attractive setting, a spacious residence, a farm group and a number of cottages for the help form the nucleus of a home for the treatment and care of female crippled children, made possible through the bequest of D. T. Watson, Pittsburgh lawyer. The work started following Mr. Watson's death, with a few children housed with employees in the remodeled residence, and continued until the completion of the new buildings in 1934.

The architecture of the home with its roofs of variegated graduated slate, orange brick walls and wood trim painted white blends in with the landscape. A main building three stories on the north and two stories on the south, with two cottages two stories on the north and two stories on the south, comprise the group. There is also a power house of ample size to provide for two additional cottages, but this is located some distance from the home and screened from it by planting.

# Designed for Living

Accommodations are provided for seventy-four girls with every facility for therapeutic treatment, a complete hospital with a bed capacity of twenty-two, including a modern operating room, and an isolation ward with seven beds, schoolrooms, a library and auditorium. The dormitories and most of the bedrooms are planned so that they receive the benefit of the prevailing summer breeze from the southwest.

The Watson Home has been made a home in fact, as well as in name, through the introduction of bright colors in its decorative scheme and numerous intimate touches not generally found in institutions. This, in fact, is what impresses the visitor as he passes through the main entrance at the north on the ground floor. The lobby and reception room adjoining this entrance are paneled with pine to the ceiling and the floors are faïence red tile with mosaic border. The hangings are stamped flowered linen and the furniture is maple.

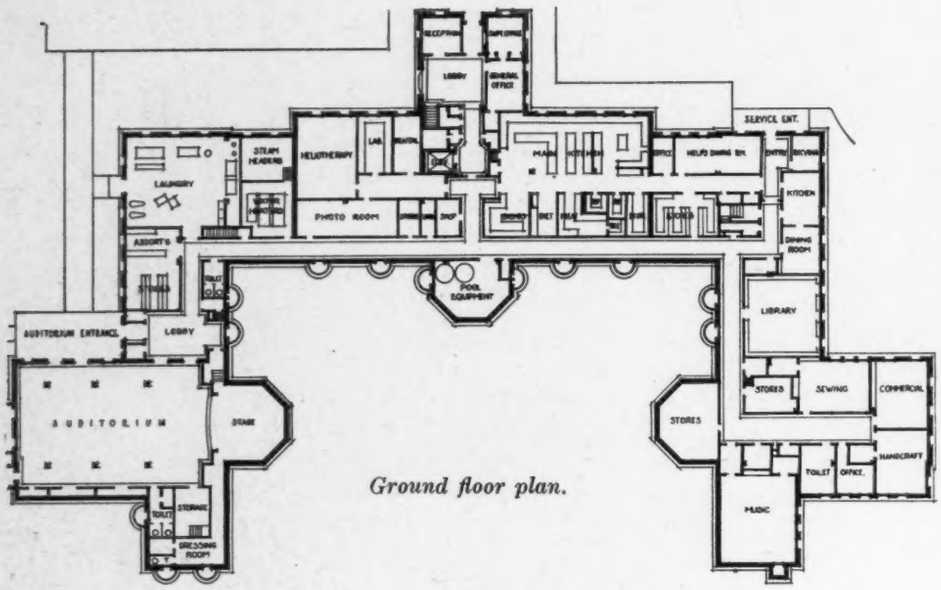
Schoolrooms and the library are on this floor in the east cottage. The library has oak bookcases to the ceiling, a varied colored asphalt tile floor and direct-indirect lighting fixtures. North of the library is a small dining room and kitchen for teaching purposes.

The auditorium in the west cottage will seat approximately three hundred. It has a high pine wainscot, above which on the side aisles acoustical material has been installed covered with a specially woven linen. The main ceiling is segmental in plaster while an acoustical ceiling is used in the aisles. The floor is terrazzo laid with brass strips. The stage curtain is the same material as that on the side walls and the stage hangings dark blue with gold marking. A red leather material was selected as upholstery for the portable seats.

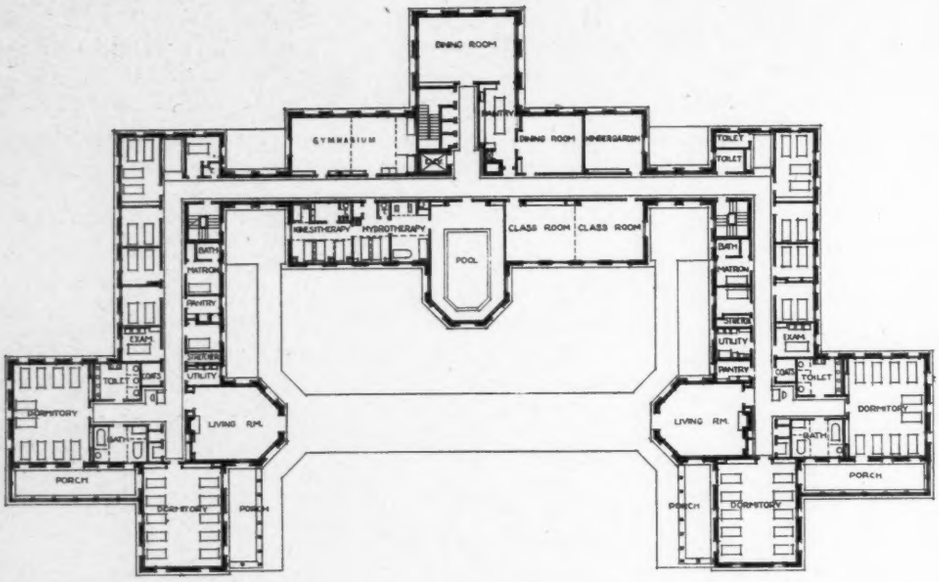
*A scene in the younger children's dormitory. The wall paper above the dado provides entertainment of its own with its quaint sketches of Cinderella and her coach and the curious looking animals from the zoo.*

The main corridor connecting the two cottages on the ground floor has a steel wainscot to prevent damage to the walls by wheel chairs and stretchers. Its green color contrasts with the floor of asphalt tile in two different shades. Also on this floor are the main kitchen, laundry and help's dining room and certain treatment rooms.

*A main building three stories on the north and two stories on the south, with two cottages, two stories on the north and one story on the south, comprise the D. T. Watson Home for Crippled Children in Leetsdale.*




*Ground floor plan.*

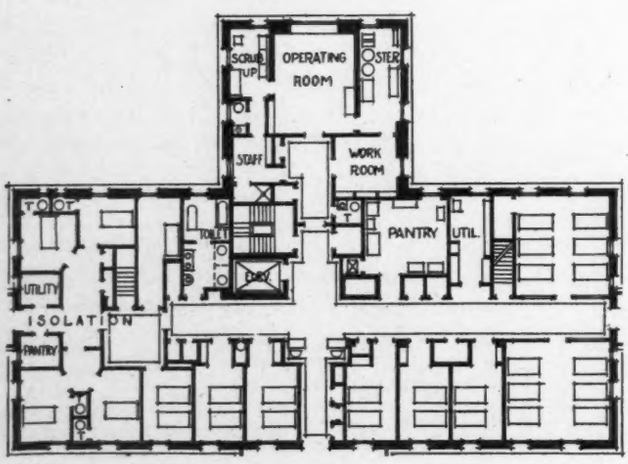



***On the first floor in the center of the main building is the therapeutic pool. On the second floor of the main building is the hospital, with its accommodations for twenty-two patients.***

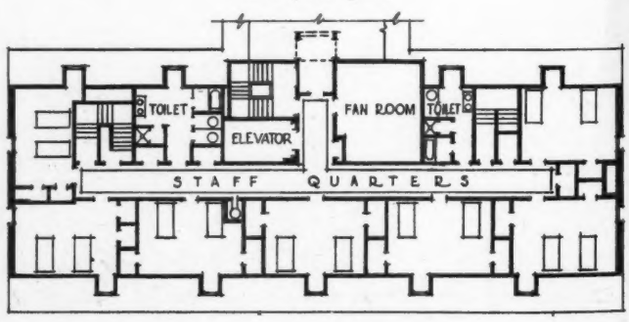
From the entrance lobby the first floor is reached by a stair and automatic push button elevator of sufficient depth to take a stretcher or two wheel chairs. The corridors throughout this floor have green and black rubber tile floors with black base and border, acoustical tile ceilings and a green steel wainscot the same as on the ground floor. The corridor doors are flush paneled steel doors with a baked-on finish of mottled green.

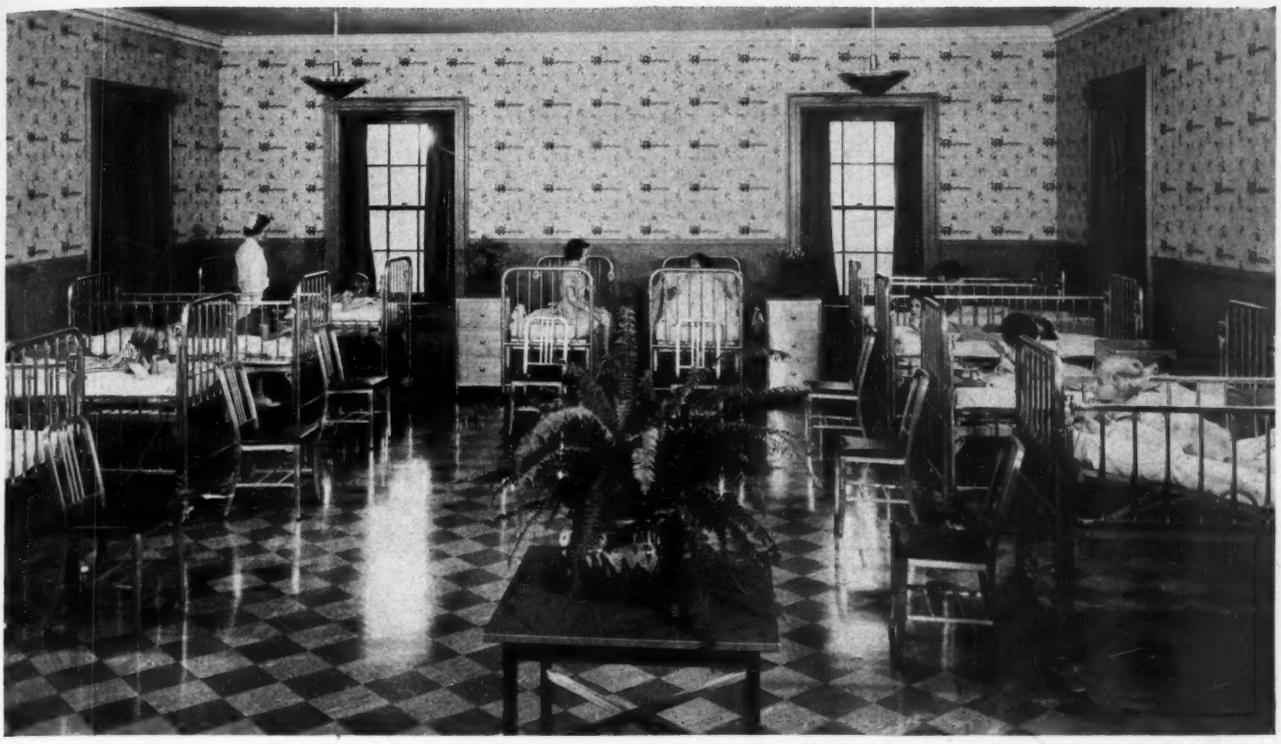
In the center of the main building and on the first floor is the therapeutic pool. Turquoise blue variegated tile walls create the proper effect and the blue tile of the pool gives the water the color of a tropic sea. The pool is 14 feet wide by 26 feet long with a depth of water varying from 2 feet 6 inches to 5 feet. The room is sunny, light coming from the south through five large circular headed windows shaded with venetian blinds. The dolphin lighting fixtures are finished in antique bronze. Adjacent to the pool are tiled rooms for hydrotherapy and kinesitherapy and across the corridor is a gymnasium which is used for corrective exercises and electrotherapy.

There are three classrooms on the first floor, the southerly ones separated by folding doors so they can be used as one large room. The patients'




*Third floor plan.*





*Dormitories are cheerful and attractive with rubber floors of alternating squares of emerald green and warm gray tiles. All the children's bedside tables and chairs are aluminum upholstered in a leatherized material.*

dining room is to the north. It has walnut trim with a low wainscot and built-in cupboards and it is furnished with small tables. The glazed wallpaper employs the characters created by Sir John Tenniel in "Alice in Wonderland." The floor is of red rubber squares with a black border. The lighting fixtures are direct-indirect finished in silver.

A smaller dining room is provided for the staff. This is like the other dining rooms except that the wall above the walnut wainscot is covered with painted canvas and the hangings are wood block printed linen.

Two cottages, similarly planned, house together sixty-one patients in dormitories and smaller rooms. In each cottage there is a bedroom and bath for the matron in charge of the children. The living room walls are paneled with pine and the floors are of random width pegged oak boards treated with an antique finish. At the side of the fireplace which is trimmed with colored marble is a glazed cabinet for books and dolls dressed in the costumes of different nations. The hangings are linen embroidered with figures of dolls and toys in color. The lighting fixtures are finished in silver, the center fixture being direct-indirect. All the furniture in these two living rooms is maple upholstered with gay varied color material.

The dormitories are cheerful and attractive with rubber floors of alternating squares of emerald green and warm grey tiles. There is a dado of painted canvas about 4 feet high capped with a soft wood hanging strip to which the children can affix prints of their favorite movie actors and actresses. Above the dado the walls have amusing papers showing animals from the zoo and Cinderella and her coach, for the younger children and a Japanese and tapestry paper for the older ones. The dormitories are lighted with indirect aluminum fixtures. All the children's beds, bedside tables and the chairs in the bedrooms are aluminum, upholstered in a leatherized material in shades to tone with the walls.

Screened porches are provided off each dormitory where the bed patients spend most of their time. Connecting the two cottages is a walk 18 feet wide flush with the first floor level and paved with Robinson stone of variegated tones. Here the children take their sun baths in clear weather.

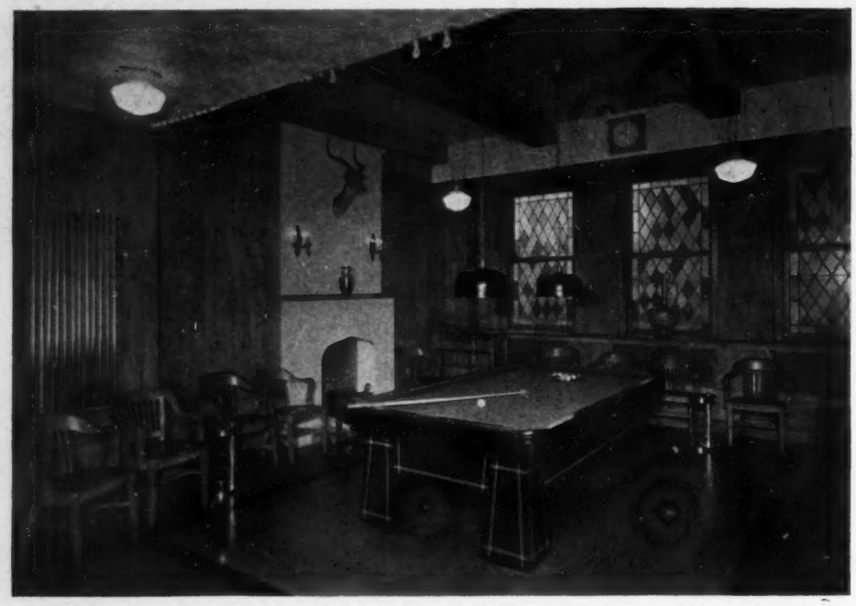
The second floor of the main building is the hospital. This accommodates twenty-two patients with an isolation ward with a maximum capacity of seven beds. This ward is so arranged that it may be divided into a two, four or seven-bed unit so that when all seven beds are not needed for isolation they can be used for general hospital purposes. On this fioor, too, is a complete operating suite. Terrazzo floors are used generally throughout this department except in the operating suite and service rooms where there are tile floors and wainscots. The hangings in the bedrooms are of bright colored sunfast washable material. The third floor provides bedrooms for fourteen members of the staff in double rooms.

# What Others Are Doing

### *Interns Have Their Own Recreation Room*

The hospital intern is getting a break. At the same time the hospital is getting better service from its staff — Polyclinic Hospital, that is, in New York City.

It all started when A. A. Jaller, executive officer, was making one of his regular tours of inspection of the basement of the hospital. As he stepped into a room which was being used merely for storage, the thought occurred of transforming it into a recreation room for interns. How much better to keep them in the building during their leisure hours and to brighten their lives generally between rounds by making it possible for them to play a game of pool, try their hand at bagatelle or even test their skill at checkers.



Work started immediately following a consultation with the house painters and carpenters. Light brown wood veneer paneling was applied to the walls. The ceiling was painted a lighter shade of buff. A pipe which ran across one section of the ceiling was disguised as an old beam and other beams added, cleverly antiqued to provide old English atmosphere. The floor was finished with brown linoleum, its only decoration being a broad band of black. Stained glass in brown tones was inserted in the three windows and an imitation stucco fireplace installed with an electric grate topped with a wooden mantle.

The first major purchase was a pool table picked up second hand, but of the latest design and in perfect repair. Another very necessary piece of equipment was a radio. After this came the bagatelle board and the checker table. Before the project had reached this stage, numerous gifts began to be received. One of the doctors on the staff donated the head of an African antelope — just the thing for over the fireplace! One or two oil paintings, the work of a member of the staff, added a bit of color to the walls.

The entire expenditure totaled about $250, but it is well worth twice that amount. On that point both doctors and the hospital management agree.

### *Hospital Routine Is Analyzed at Montefiore*

At Montefiore Hospital, New York City, checking of routine service to the patient has been carefully organized so that it will omit nothing. A list has been prepared[1] of points to be checked in connection with every aspect of the hospital that directly affects the patient or his relatives. Starting with the hospital buildings the list covers the lobby and corridors, ambulance entrance, administration, information office, waiting and reception rooms, public rooms, admitting offices, social service, ward admission and accommodations, medical service, nursing service, food service, housekeeping, religious services, maintenance department, recreation and miscellaneous services. Thus the administrator has the satisfaction of knowing that his hospital routine provides adequately for all of the services given in this check list, that service to his patients is efficient and humane.

[1] "Serving the Patient—A Check List" by Morris Hinenburg, M.D., The HOSPITAL YEAR-BOOK, Fourteenth edition, page 92.

### *Graphic Explanation of Hospital Expenses*

Enclosed in mailings, given to patients and doctors, distributed through all the channels open to a hospital goes a buff colored card, 6 inches long and 3½ inches wide. At the top of the card, which is printed in brown ink, is a statement in large type: "How the Ravenswood Hospital Dollar is Spent." In smaller type is the second line, "Year 1935—Average Occupancy 70 per cent."

About seven square inches of the card is taken up with a circle, looking more like a problem in geometry than one in finance, as it is sectioned off in percentages, 38½ per cent, salaries; 35 per cent, supplies; 12 per cent, charity and part-pay; 6½ per cent, retire indebtedness; 5 per cent, depreciation; 3 per cent, interest and taxes.

To the right of the circle, a block of print says, "Everyone is interested to know what constitutes hospital expense. The chart shows at a glance where our income goes. Your attention is directed to the fact that the hospital has no endowment funds with which to render free or part-pay services." The Ravenswood Hospital is in Chicago, and J. Dewey Lutes is superintendent.

*Probably you can think of one or more practical ways to save time or increase efficiency. The Modern Hospital will welcome your ideas to put before other hospitals*

# Servicing the Laundry

*The American Institute of Laundering coordinates research activities in the laundry industry, offers data on newest developments and provides consultation on laundry problems*

THE Laundryowners National Association, the fourth oldest trade association on the continent, has long been recognized as a leader, both in point of thoroughgoing cooperation between members and in its program of practical research and study in the interest of improved laundering methods and efficient plant operation.

This association, now in its fifty-third year of active service, realized some seven years ago the fulfillment of a long cherished hope when the American Institute of Laundering was established at Joliet, Ill.

The institute, a $500,000 corporation, completely equipped as a testing and research laboratory, is dedicated to the advancement of "the interests and general welfare of laundryowners and all persons interested in the laundry industry and in particular the interests and general welfare of the laundryowners national association." It is an organization through which advanced theories in mechanics and plant management may be tested and developed; a laboratory for the analysis and study of cotton, linen, wool, silk and other fabrics, pure, mixed or unadulterated; a place for the instruction of superintendents, foremen, department heads and other executives and employees in approved standards of practice, and a bureau for furnishing information, advice and assistance to laundryowners in solving the problems and difficulties confronting them.

The commercial laundry unit of the institute, a regular laundry serving Joliet and its surrounding territory, is a practical proving ground in laundering methods.

The Laundryowners National Association numbers among its membership over 2,000 active laundry members in the United States and Canada (representing 65 to 70 per cent of the industry by volume) and affiliate members in all parts of the world.

The headquarters building of the association and its institute houses the offices of the administrative and service departments of the L. N. A., the research and testing laboratories of the insti-

tute and the lecture and recitation classrooms of the institute's vocational training school.

This school serves as a practical training ground for executives, superintendents and foremen seeking a more thorough knowledge of various phases of the laundry business, and for young men and women preparing themselves for positions of responsibility in the laundry industry. Its course of study provides five eight-week periods of intensive instruction in the following subjects: power plant engineering; plant production; textiles and washroom practice; accounting and office administration; sales and advertising. Each of these courses is under the direction of one or more experienced instructors and each combines practical laboratory work with lecture and discussion sessions. A completely equipped student training laundry affords thorough practical instruction in all phases of actual plant production. Any one of the vocational school's eight-week courses may be taken singly, at the option of the student.

This school has achieved world recognition and each year students have come from the far corners of the world. Representatives from England, Denmark, Union of South Africa, Holland, Austria, Panama Canal Zone, France, Sweden, Germany, Spain and Belgium have been in attendance at the school, as well as students from every part of the United States and Canada.

### *A Twofold Purpose Served*

The service activities of the Laundryowners National Association serve a twofold objective: (1) the dissemination to all members of information on the latest developments in the industry and the results of the constant research work at the institute; (2) consultation with individual members on their own particular problems of operation and management.

Service bulletins and special reports, news letters, the L. N. A. Record, a quarterly, together with special manuals and publications, keep members thoroughly informed on the latest technical data, standards of practice and developments within the industry. Members are also kept informed at all times on existing and pending legislation affecting laundries, and constant contact with legislative bodies is maintained by the L. N. A. through letters, telegrams, resolutions and appearances of members before committees.

*Two members of the research department at work in one of the testing laboratories of the institute.*

Each year some 20,000 letters are written by the L. N. A. headquarters staff to association members in reply to special inquiries on individual problems of plant production, operation and management. Members of the L. N. A. field service staff go into the plants of member laundries, upon request, and make cost reduction surveys with recommendations on methods and procedure to answer the particular requirements of the individual plant.

Functions of the institute of particular benefit to hospital and other institutional laundry members are those carried forward by the department of research and textiles and the department of engineering.

The department of research, under the direction of George H. Johnson, national authority on fabrics and fabric launderability, offers four valuable services: (1) consultation on washroom problems; (2) test bundle service; (3) fabric testing service, (4) inspection of damaged articles.

The services of the department of research are available to members for consultation on all problems encountered in the washroom, and the most recent recommendations on improved washroom practice are brought to the attention of laundry operators. Bulletin material on washroom methods and technical problems is also prepared by the department.

*Left, research worker tests tensile strength; right, photometer determines whiteness retention of laundered fabrics.*

The test bundle service offers member laundries the opportunity of having the quality of their work scientifically checked at the institute. Test pieces are furnished by the association upon request, and after twenty complete launderings in the member plant, are returned to the laboratory, where they are graded for tensile strength loss and whiteness retention. The department then advises the member as to the quality of work being produced.

The fabric testing service provides a valuable aid to buyers of textiles that are to be laundered in the hospital laundry. Through the making of comparative tensile strength tests, the laboratory can often save the institutional buyer considerable money by ensuring that he obtains the best possible fabric for the money that he has to spend. In this service the institution submits to the department of research samples of new materials to be investigated under laboratory conditions. Sheets, gowns, nurses' uniforms and other washable fabrics used in the hospital constitute a considerable item of expense, and this scientific testing provides an excellent check on the quality which the purchaser may reasonably expect to secure.

The ever recurrent question "What caused the damage?" is answered by means of the institute's inspection service on damaged articles. Such articles may be sent in to the laboratory for analysis and a report will be rendered indicating whether the fault was that of the laundry, the user of the article or of the fabric itself.

The department of engineering offers institutional laundries a valuable service in recommendations for correcting inefficiencies in plant layouts. The proper arrangement of machinery and equipment is essential to production efficiency, and appreciable operating savings can be effected, in many cases, through plant layout correction. Where power plant problems are a factor the department also lends assistance.

The services of trained L. N. A. field representatives for the making of thorough cost reduction surveys may also be secured through application to the department of engineering. On a fixed daily charge basis one of these field men will go into the laundry plant, make a complete inspection and survey, and submit a detailed report on recommendations for measures to reduce operating costs.

*Students in the 1935 plant production course at the vocational training school receiving practical instruction.*

Time and motion studies of various production methods are carried on by the department of engineering in conjunction with the management of the institute's commercial laundry unit and the data developed are made available to members through reports and motion picture films.

Finally, this department can be of aid to institutional laundries in the establishment of wage incentive plans for workers, to supplant straight hourly or daily wage plans now used by many institutional laundries.

In subsequent articles to appear in The MODERN HOSPITAL the results of studies at the institute will be presented. These will indicate clearly the character of service rendered by the institute.

# Someone Has Asked—

### *How Should the Discharged Patient Be Instructed?*

In too many institutions patients are discharged following hospitalization without the least idea as to what they should do when they reach their homes. Usually the word-of-mouth instruction given by the doctor is forgotten by the patient before she has donned her street clothes. Such a plan is slipshod and inefficient. It is, however, better than no instruction.

Many hospitals employ a printed slip which is placed under the clip of the patient's chart when his or her discharge becomes imminent. This form when properly filled out by the resident physician contains information as to bathing, food, dressings, exercise and the safe time to return to work. It should also contain a statement advising early consultation with the family doctor.

Advice to the patient any less definite than this is usually worthless. This is a highly important matter. Patients are usually grateful for this display of interest by the hospital in their future welfare.

### *How Often Should Inventories of Supplies Be Taken?*

A continuous inventory should be kept of general stores and it should be rechecked monthly in total.

Linen in active use should be inventoried once a month with recounts on shortage immediately, and linen that is not made up or is made up and not issued needs a monthly count.

Instruments and utensils in the operating room and out-patient department should be checked monthly, with a daily check by the supervisor, while every three months appears to work out satisfactorily for floor equipment, in our experience. All rubber goods are labeled with the month and year of issue as well as the floor or department getting them. This in itself tends to keep an inventory correct. Our stainless steel utensils are being marked similarly and we find this procedure helps in keeping track of their location and in the correctness of our inventories.

All the equipment in the dietary department is inventoried once a month and we find that sufficiently frequent. In four years we have lost nothing in the way of teapots, coffeepots, sugar containers, and practically nothing in the way of flat silver.

What we feel helps in all our inventories is the fact that it is a marked offense to throw anything away which has apparently outlived its usefulness or otherwise is unfit for further use. On exchange day, Wednesday of each week, all broken, damaged or worn-out articles are listed by the various departments and floors concerned and turned into the stores, there to be gone over by the head of the department and the assistant superintendent. We find it possible to salvage an important number of articles which find service elsewhere, or by some modification are sent back from whence they came. For example, glass thermometer holders for the most part are usually broken in the upper first inch and cost $3 a dozen. We regrind the upper broken part at a cost of $1 a dozen and find the reground holder has a longer life than the original.

Major equipment, such as beds, mattresses, bedside tables, laundry equipment, engineering equipment, are inventoried once a year, while the pharmacy, which falls into the same category as general stores, is checked monthly.—S. R. D. HEWITT, M.D.

### *Should Photomicrographs Be Made for Staff Meetings?*

The superintendent should do everything in his power to increase the efficiency of staff conferences. To encourage the constant comparison of antemortem and postmortem findings is laudable. To this end staff members often request the purchase of apparatus so that the microscopic pathology of tissues sent to the laboratory for examination may be displayed and discussed by the whole group.

Up to the present time the purchase of apparatus for making lantern slides has been rather expensive, from $100 to $200 being required to procure the photographic apparatus alone. Executives who desire to add this apparatus to their laboratory equipment can do so cheaply, at an expenditure of not more than $25 or $35.

The purchase of a secondhand camera, its fixation to an upright with an ell base, so that it will stand on the floor and the securing of a collar to attach the camera to the top of the microscope at the point where the lens is found are the only requirements. This simple apparatus can be constructed by most institutional carpenters. The slides thus secured are excellent. (Further information relative to this simple equipment can be secured by writing to the editor of The MODERN HOSPITAL).

### *What Compensation for Oxygen Therapy Service?*

Oxygen therapy equipment is rather fragile and expensive but the spectacular results to be accomplished with it in certain cases demands its presence in every well equipped hospital. This service cannot be made to pay for itself if it is used in every case needing oxygen therapy, because those able to pay cannot be charged an amount over and above its cost of operation to pay for its use in less fortunate cases. We have figured the cost of oxygen therapy service at $15 for twenty-four hours of continuous operation. Full-pay patients are charged this amount. Part-pay patients are given the service when it is needed for whatever part of the cost they can pay, and the service is furnished to free patients, when urgently needed, without charge. Our equipment is portable and is rented to out-patients at cost ($15 a day), but it is not loaned to free patients outside of the hospital. — DOUGLAS JENNINGS, M.D.

### *What Housekeeping Service Is Required of Student Nurse?*

In our institution practically no housekeeping service is required of the student nurse, but it seems to me that all of the housekeeping in the patient's room should be done by the student nurse. Because we are confining the training of the student nurse solely to professional work, because we are omitting all housekeeping or other menial tasks, many sick people are turning to practical nurses who know how to keep a room clean and tidy, make the bed, look after the baby and prepare the meals.

As a result, nurses are standing in the way of their own employment because of insufficient preparation in the essentials of good nursing. — BRYCE L. TWITTY.

### *How May Hospitals Honor Donors of Endowed Beds?*

This question has been submitted by an Eastern hospital superintendent who asks for an opinion concerning the placement of tablets of acknowledgment of such gifts as endowment or maintenance funds.

In some hospitals those who endow or equip a private room or other hospital unit are given credit by the placement of a small brass plate on its door. In wards, this plate is frequently placed at the head of the bed endowed. Preference as to where the acknowledgment should be placed is of course, a personal matter.

Many believe in devoting ample wall space in the general waiting room for the display of these memorial plates. Here their position is likely to be much more permanent and such a scheme is certainly a dignified public expression of gratitude on the part of the hospital. This is probably the plan of preference.

### *Should Small Hospitals Maintain Allowances for Bad Debts?*

Theoretically every hospital should maintain allowances for bad debts, but in many small hospitals it is not practical, for the results obtained do not always justify the additional expense involved.

Allowance for bad debts presupposes accounting on an accrual basis and a lot of attention to detail that the person who usually keeps the financial records of the small hospital has neither the training nor the time to give. Accounting in a hospital that averages up to twenty patients a day is usually a part-time position. More than half the general hospitals in the United States have less than fifty beds and the general average for this group is around twenty patients a day, or approximately 600 patients during the course of the year.

From 20 to 40 per cent of these patients are usually free, which means that about one pay patient is discharged a day. Many of these patients pay all they will ever pay in one payment, though others may make many payments. The average small hospital will have not over ninety entries in the record of receipts during the month and the number of checks written would not exceed that number.

With less than six entries to be made in receipts and disbursements during the day, it is obvious that bookkeeping becomes a side issue of the superintendent's office assistant, the only person continually in the business office. In addition to the bookkeeping, this assistant usually is the information clerk, admits patients, answers the telephone, orders supplies, is responsible for the clinical records, and handles all the correspondence. As a general rule a trained accountant capable of keeping books on an accrual basis would not take a position like this and many trained accountants probably would not be qualified to fill it.

The great majority of the small hospitals are in small towns and rural areas where it is frequently difficult to arrive at the allowance for bad debts. Collections may be poor for several years and then a good crop with high prices reduces the ratio of bad debts to practically nothing, as has happened recently in the tobacco belt where numbers of farmers have paid hospital bills contracted years ago. In this case the percentage allowance for bad debts goes haywire.

The argument for the accrual basis as a check on the honesty of the person handling the money is not strong in the small hospital, where it is much more difficult to embezzle successfully. Everybody knows everybody else in the community, and the superintendent usually supervises collections so closely that it would be necessary for both the hospital executive and bookkeeper to be dishonest, an extremely rare occurrence. It is my experience that the folks responsible for the management and financial records of the average small hospital as a group are the most honest people in the world.—GRAHAM L. DAVIS.

### *Should Professional Service Receive Credit for Earnings When the Work Is Free?*

There is a definite value in recording all gross earnings for a special service department even though some of the work is free or provided to patients at a discount. The earnings can be recorded according to an agreed fee schedule. The discounts or allowances from the original fee schedule can then be subtracted to give the net charges against patients.

The advantages of recording the gross earnings are as follows:

1. The record gives an estimate of the adequacy of the fee schedule charged in the department and indicates whether the scheduled rates for the special services (when taken as a whole) are more or less than the costs.
2. The record gives a measure of the activity in the department, since the gross earnings fluctuate directly with the volume of activity.
3. The record provides the basis for establishing agreements with professional groups serving the departments, such as private practitioners of roentgenology or pathology.

The recording of gross earnings does not imply that a hospital should avoid charity work or free service. Where hospital policy includes a liberal program of free service, the recording of gross earnings will aid in measuring the magnitude and value of such a program.—C. RUFUS ROREM.

### *What Restraint Equipment Do Small Hospitals Need?*

Every hospital, no matter how small, urgently needs from time to time some type of restraint for delirious or maniacal patients. When the occasion arises for its use there is no time to prepare a substitute or to purchase suitable equipment.

Leather cuffs and anklets and strong 3 or 4-foot straps are commonly employed. This method of restraint is necessary only for the most violent patients and its appearance creates an impression of harshness which is to be avoided. Muslin restraints are cheap, serviceable, can be made in the hospital and are less likely to chafe the patient's wrists and ankles. Padded, 3-inch double muslin strips properly applied with a clove hitch and knot lock are capable of restraining the most agitated. A folded sheet for shoulder restraint is sometimes used along with ankle and wrist restraint.

The treatment of delirious patients should, above all, be humane and safe. The use of hot and cold packs with mild drug restraint is often effective. The straight jacket of canvas is rarely employed outside of the most violent wards of hospitals for the mentally ill.

*If you have any questions to ask, the Editors will be glad to discuss them in a forthcoming issue*

*Volunteer workers at the Children's Hospital, Columbus, are seen above packing away in the storeroom gifts of food received on donation day. The lower picture is also a donation day scene. On the opposite page is a view of the hospital's Thrift Shop.*

# With These Twigs . . .

*Granted that they can't make a tree, women at Columbus, Ohio, can make Twigs and do. Twigs are small groups of women working in a finely organized whole for the support of that city's Children's Hospital*

By EVA ELLEN JANSON
Superintendent, Children's Hospital, Columbus, Ohio

TO THE women's board of managers, about 150 in number, goes the credit of carrying on without a deficit the Children's Hospital, Columbus, Ohio. Meeting regularly the second Thursday of every month in the year with the exception of August, and holding its regular annual meeting in the latter part of January, this board has the final decision on any physical changes suggested for the hospital proper. It is this group of women who form the nucleus for the women's auxiliaries of the hospital.

The Women's Board of Managers, Twigs, Junior Twigs, Thrift Shop and Pleasure Guild all sound intriguing in name, but, they are working organizations and essential to the running of the Children's Hospital.

The Twigs are organized for the purpose of maintaining the hospital and acquainting the community with the work done there. We have fifty-eight Twigs, organized under a general chairman, vice chairman and a general secretary-treasurer. An annual luncheon is held every year that all Twig members are invited to attend in order to hear the report of their accomplishments and learn of the progress of the hospital.

Groups of from ten to forty women may organize with a chairman and a secretary-treasurer and, following the rules and regulations given them by the general chairman, form a Twig of the hospital, although, groups of more than twenty-five or thirty become rather unwieldy. As an objective, Twigs furnish paint, curtains, rice,

children's and surgeons' gowns, sugar, ether — there is an obligation to fit every group.

Every Twig meets the first Wednesday of the month to discuss ways of carrying on activities and meeting obligations.

The annual donation day is sponsored by the Twigs with the vice-chairman serving as general chairman of donation day and barrel day.

Annual barrel day is held the week preceding donation day at which time red barrels are placed on the prominent street corners of the city and money donations are requested. This work is carried on for the most part by the younger members of the Twigs and the Junior Twigs.

Annual donation day has been observed by the hospital since its inception. On that date Columbus merchants, both wholesale and retail, and all the people of Franklin County are asked to send donations of food to help provide nearly 200,000 meals, infant formulas and infant feedings which are recorded annually in the hospital's dietary report. These people are reached by the Twigs in personal solicitations, radio talks and newspaper articles.

*How Thrift Shop Functions*

The Thrift Shop, where used articles are donated and sold for the maintenance of the hospital, is under the direction of a chairman, secretary-treasurer and executive committee, all of whom are members of the women's board of managers. There are two full-time paid employees—a janitress and a cashier. The clerks are volunteer workers recruited from the Twigs. Each Twig is assigned to the Thrift Shop for one week and is responsible for collecting and selling merchandise for that week. A schedule for the year is made out six months in advance and each member of a Twig then sets about collecting things that are seasonable and saleable for the time she will serve. There is a great deal of competition among the groups to see which Twig can realize most while serving in the Thrift Shop.

The shop is neat, clean and orderly and is in a downtown market district where people who are most likely to need such a service will find it accessible. Many used articles of fine quality can be purchased at reasonable prices. In our city the Thrift Shop has become a tradition and many friends of the hospital who move to remote parts of the country remember us and send merchandise to the shop. It is surprising the demand the shop has for children's schoolbooks, shoes, dresses, hats, men's shirts, men's suits, women's hats, coats, dresses and shoes, kitchen utensils, furniture, magazines, overshoes, toys. The Thrift Shop gives a splendid service to the community in itself aside from helping in the financial support of the hospital.

The Pleasure Guild is made up of fifty young women who have leisure time and was, in fact, the original service auxiliary of the hospital. It was from its activities that the hospital had its beginning over forty years ago. This group has its own constitution and by-laws. The president elected each year becomes a member of the women's board. The service of the Pleasure Guild consists of making dressings, working at the admitting desk in the out-patient department and providing motor service, which means bringing patients to the hospital for treatments, and entertainment. The entertainment consists of story-telling, reading, crafts, handwork and parties on every holiday. The children in the wards and the members of the hospital personnel look forward with much pleasure to these delightful occasions. The guild also gives service in the Thrift Shop.

The annual horse show which is an important social event is sponsored by the guild. The proceeds from this beautiful and thrilling affair are given to the hospital.

All this activity is necessary because the Children's Hospital has a very small endowment from which it receives only $20,000. The hospital's budget for 1934 was $86,000, therefore $66,000 must be raised annually. The hospital is not a member of the community fund, for when the fund was started in Columbus it did not seem advisable to give up the hospital's growing and efficient auxiliaries.

Those of us who are acquainted with organization and administration work know that this work does not just happen. It requires great skill, imagination, time and administrative ability to accomplish all these things through the hospital organization. The guiding spirit is Mrs. Truitt B. Sellers, who has served as president of the women's board of managers for twenty years and is also a member of the board of trustees.

## A Perishable Commodity

The financial and statistical data dealing with each month's operation of the hospital are a highly perishable commodity. The value of these data is in direct ratio to the speed with which they are available for management purposes. A monthly report received on the twenty-fifth of the month following is of little value for management purposes. A report received on the fifth or the eighth of the following month is easily worth twice as much as one received on the twelfth.

Monthly reports are costly, but even though this slightly increases the cost, they should be available at the earliest possible moment in order adequately to serve as a management tool.

# The Next Great Step in Nursing Education

By A. C. BACHMEYER, M.D.
Director, University of Chicago Clinics

*The establishment of an accrediting agency for nursing schools and the publication of state board statistics are two of the measures suggested here for the advancement of nursing*

SCHOOLS of nursing have shown considerable improvement as the result of years of discussion and of the work of the Committee on the Grading of Nursing Schools but a great deal remains to be done. The rate of improvement should be accelerated. The need for an authoritative mechanism that will bring about a recognition of schools of nursing as educational institutions, that will stimulate improvement in teaching practices, raise the quality of the personnel of the faculties and the scholastic standards of the schools is obvious.

It is but natural that nursing should inquire concerning the situation in other professions and in the field of general education. Have they had similar experience? How did they meet the situation? In a number of instances they learn that accrediting agencies which classify, grade, approve or otherwise exercise control over schools have been established. Examples of various types of such agencies are encountered in general education, in the library field, in medicine, dentistry, law and other professions. Some of these agencies are of long standing and have come to exert great influence, while others are of recent establishment and consequently have not developed.

All are without legal status, but in those instances in which there is legislative control by the states through examinations for licensure to practice, state boards, usually conservative and often subject to political control, have followed the lead of such voluntary agencies and have strengthened their regulations.

### *A Parallel in Education*

American education developed as the result of the leadership and initiative of outstanding educators largely without restraint or organized control or guidance until the beginning of the present century. Improvement in teaching and in scholastic standards was continuous, but slow and irregular. There were, however, many poor schools and spurious colleges scattered throughout the states. No centralized government control was possible nor can it be unless the federal constitution is changed, for that document leaves this control to the individual states.

In consequence of the existing situation, without thought of developing any centralized control or accrediting organization, a number of good colleges and universities formed an association in 1895 for the purpose of bringing about better understanding and relationships between them, to improve scholastic standards and educational conditions within the member institutions and to encourage experimentation and investigation relating to educational problems. Thus was founded the North Central Association of Colleges and Secondary Schools. Other schools sought to join the association and through the development of qualifications for membership, the association, within a comparatively few years, began to wield a strong influence upon the development of secondary and preparatory schools and also upon institutions of higher education. This association, until recent years, had regulations and prescribed standards that were arbitrary and while based on the best judgment of excellent educators were not based upon scientific fact. Because of this and in recognition of the need, the association recently has revised its entire procedure of inspection and accrediting. The new manual of accrediting procedures presents a flexible program rather than fixed standards and will stimulate improvement in schools rather than have a deadening effect upon initiative and the development of individuality in institutions.

This association limits its field, as its name implies to the north central section of the country,

comprising the territory of twenty states. Though its decisions are all advisory in nature it is the strongest and most forceful influence for improving school conditions and standards in the country. Its success and value is attested by its continued growth, numbering now almost 2,500 secondary schools and 300 institutions of higher education among its members.

Membership is deemed an honor by all institutions, giving them a standing among educated men and women and serving as a guarantee of the institution's efficiency. It has no permanent central office, no paid officials, though certain clerical assistance and expense budgets are provided for the performance of its work. The association transacts its business through an executive committee, special commissions, state committees and the general body of the association which meets in Chicago annually.

This accrediting agency is an organization of member institutions provided and maintained by them for their mutual benefit. It is an agency which has a wholesome effect because its members subscribe to the high ideals and splendid policies that have been adopted.

While other agencies, similar in type and function exist in other sections of the country, the North Central Association is cited because it is the oldest and most influential of the group and has furnished the pattern for a number of others.

A somewhat different condition exists among the professions. Here, there are accrediting agencies consisting of associations of professional schools, similar in organization to the North Central Association and also agencies representing the membership of the profession. These latter are bodies having no direct educational functions but which the profession, as a whole, has set up in order to assure constant improvement in the preparation of the new members that enter its ranks. It will serve our purpose to consider one of those agencies, namely, that in the field most closely allied to nursing, that of medicine.

### *Medical Profession Wakes Up*

In the early years of the century, the medical profession became concerned about the conditions prevailing in the medical schools. There were many colleges, proprietary in type, which were graduating poorly trained men. Upon the initiative of leaders in the profession a committee was appointed by the president of the American Medical Association to study the situation. This committee recommended that the association assume the task of developing a national influence that would exercise control of medical education because it was obvious that there was a great need for improvement in the schools. This recommendation was adopted and resulted in the establishment of the council on medical education and hospitals of the American Medical Association.

As in the case of the North Central Association, this council had no legal powers, but its influence soon became a potent one. In 1905, it published the first analysis of the results of state board examinations, and developed tables dividing the medical schools into four classes on the basis of the percentage of failures of their students in these examinations. This led to an inspection of the schools, in which they were graded on ten factors. The results of this grading were published and while some improvement followed it was not deemed sufficient.

### *An Epochal Report*

The council then approached the Carnegie Foundation, won the enthusiastic interest of President Pritchett and the splendid report of Dr. Abraham Flexner resulted. His report confirmed the earlier findings of the council, but was more specific and criticized the situation much more severely. Following the publication of that report and even before, many schools closed their doors and marked improvement was effected in others. Since then almost all medical schools have become integral parts of universities and there is constant effort to conduct them upon the high level of university performance. The council on medical education remains active and exercises a vital influence in the field of medical education.

The improvement that has been effected in medicine has come about through the active cooperation of the council of the American Medical Association, the Federation of State Medical Boards, the Association of American Medical Colleges and other allied groups, including the Associations of American Universities and Colleges, and particularly of the Carnegie and Rockefeller Foundations and the General Education Board.

The council consists of seven members, one appointed each year by the president for a term of seven years. It has a full-time executive secretary, a central office, clerical staff, three field inspectors (whose duties, however, are primarily directed toward the inspection of hospitals) and a budget of about $75,000 a year. It has adopted certain fixed minimum standards with which medical schools must comply for approval. It inspects schools upon the initiative of the secretary or the members of council as occasion may indicate.

Criticism has at times been directed at the council for what were considered to be arbitrary actions, but none can say that its influence has

been other than in the interests of improvement in educational affairs.

And now to return to the situation confronting nursing.

There is at present no national body that exercises any control over or that definitely guides nursing schools. The establishment of an accrediting agency offers much promise as an aid in solving some of these difficult problems and it may well be that this is the effective measure that is needed.

Opinions concerning accrediting agencies, however, are far from being uniformly favorable. Some leading educators definitely oppose them. President Eliot of Harvard, years ago, wrote a pamphlet entitled "The Curse of Standardization." Chancellor Capen of the University of Buffalo, who served as a member of the grading committee has repeatedly voiced his opposition to such an organization, though it is reported that he has said that the North Central Association is the best among them because its standards were constructed with great care, were liberally interpreted and the association was always willing to revise them.

*Weak Points of Standardization*

The objections to accrediting or standardizing agencies may be listed under three headings:

1. Standardization is not good for education. It tends to discourage experimentation and restricts the activities of pioneering individuals. It has often a repressing effect, retarding the growth and development of institutions and ideas. The weaker schools which need greatest stimulation are content to comply with minimum standards and not bestir themselves to rise above such minima.

2. Prescribed standards have never been tested scientifically. Usually they are formulated only upon the best judgment of individuals and such judgment may be quite at fault.

3. Standards deal with the machinery of education, not with the product. They are designed to measure the institution not to measure education.

In the recent revision of its procedures, the North Central Association has endeavored to overcome these objections. A most careful study has been made and instead of rigid standards, a statement of policy has been published, and procedures have been adopted that provide for flexibility and fluidity. Under this procedure the college or school that is admitted to membership will be stimulated to exert continual effort to improve its educational practices. This revision of method may be regarded as a definite step forward in the evolution of accrediting procedures that will ultimately measure an institution's excellence by measuring the achievements of its students.

The program of this association, in my opinion, removes to a large extent the objections that have been voiced against such agencies. The old plan of prescribing rigid minimum standards served its purpose but is now obsolete. No one can measure the great good that has resulted from the activities of the North Central Association or the council on medical education of the American Medical Association.

*State Board Statistics an Available Weapon*

Nursing, like medicine, has available at least one measure of the effectiveness of its schools. I refer to the results of examinations conducted by the state boards of nursing examiners. If, as did the council on medical education in the beginning, and as it continues to do, some central agency could obtain and publish a compilation of these results it would soon have a wholesome effect. Because of political interference it is not unlikely that many state boards would hesitate or refuse to publish such data themselves, but there should be no difficulty in obtaining the information through state nursing organizations. Even the state organizations might be unwilling to publish the data but there should be no such compunction on the part of a national body. The information would soon filter through to the territory of the local school. Students would shun the school whose students failed regularly and in large percentage to pass the examinations and, as was the case in medicine, such schools would either improve their teaching or close their doors.

In addition, I urge strongly that the nursing profession earnestly consider the establishment of an accreditment system for its schools. A move in this direction has been made through the organization of the Association of Collegiate Schools of Nursing. This body, however, limits its membership to schools of nursing associated with approved colleges and universities and it is not suggested that there be any change in this connection. Some of the collegiate schools are such in name only and this association should exercise great care in admitting schools to membership.

While I share the hope and belief of those who are of the opinion that all nursing schools should be integral parts of colleges or universities, it is obvious that that goal cannot be quickly attained. It will require years of arduous effort for such achievement. The organization of an accrediting agency need not be an obstacle to such attainment, however, but rather, through the years, may well lead to that end.

In the National League of Nursing Education, it appears that nursing has an agency that could well develop the mechanism for accrediting its schools. While membership in that agency is on a personal basis, an institutional division might be established.

If, however, this appears not to be feasible or desirable, then it seems that, following the example of the North Central Association, a comparatively small group of the best noncollegiate schools could form an association for their mutual betterment and through the prescription of qualifications for membership soon develop a wholesome influence upon all nursing schools. The recognition of such an association of nursing schools by the various national nursing organizations and their active cooperation would stimulate schools to apply for membership and soon enhance the power and effectiveness of the association. A deliberate development and growth, especially in the first few years, would be far better than an endeavor which sought quickly to evaluate and approve or disapprove the large number of nursing schools that still exist.

The establishment and development of such an accrediting agency need not be an expensive undertaking. The task is not an easy one, but I believe the splendid women who have worked so long and earnestly for the improvement of nursing education would gladly give their time and energy for so worthy an enterprise. The work must be done by those actively engaged in nursing education. It cannot, with safety, be delegated to those in other fields, skilled and competent though they may be, for actual experience in nursing education and an understanding of all its peculiar problems and situations are essential.

It requires time and effort to develop wise policies, standards and procedures. Investigation and experimentation are essential. It may be well to adopt some if not all of the principles that have guided other accrediting agencies, but it would be unwise to copy their procedures without careful study and assurance that they were applicable to the nursing situation. Much of the preliminary work has been done. The data furnished by the grading committee reports, the "Activity Analysis of Nursing" and a number of other studies and analyses of the duties and responsibilities of the graduate nurse provide much of the material necessary for the development of a sound policy concerning the conduct of nursing schools.

It is obvious that there can be no adequate reason for continuing many of the schools which are obviously bad or schools that cannot comply with the most meager of qualifications. Schools dependent for their practical instruction upon hospitals with so small a number of patients that it is impossible to give the students adequate instruction in nursing procedures or permit them to study the various types of patients or diseases, should be closed. The grading committee would close schools in hospitals having less than fifty patients but I should prefer to see that number doubled.

If the measures that have been suggested were adopted by the nursing profession a long step forward would have been taken. The pace of improvement in the nursing schools would be greatly accelerated. Such measures would, I believe, furnish the stimulus and guide needed for the further development of nursing education leading to the professional plane upon which rightfully it should be conducted.[1]

[1]Read at the meeting of the Central Council for Nursing Education, Chicago, February 17, 1936.

# Danger of Improper Laboratory Diagnosis

Medicine today relies greatly upon the laboratory. As diagnosis becomes more exact and diagnostic procedures more intricate, the demand for laboratory assistance constantly rises. Unless great care is taken in the choice of laboratory personnel and equipment, inaccurate laboratory diagnosis may lead the clinician far astray and prove disastrous to the patient. This is a particular problem in small hospitals, where limited funds and a small turnover make it impossible to command the services of a good pathologist or biochemist and technicians.

The professional staff of the laboratories should be as good as financial and other considerations will permit. Conscientious care and accuracy mean more than brilliance. Half trained or careless technicians are a distinct menace. In small hospitals a head of the department should be insisted upon. With the technical advice of this director, the superintendent should insist upon a careful check-up of the service.

Only that should be attempted which can be done accurately, for it is better to have no laboratory diagnosis than a wrong one. Equipment should be carefully inspected. Does the metabolic machine really give a basal reading? Solutions should be checked for potency and accurate standardization. Industrial laboratories exchange solutions and ferments for mutual cross checking. Could this not be done more by hospitals? Is your urease active? Are your stock blood sera II and III really capable of typing blood accurately? Do you trust your blood cultures or is there always that lingering doubt? Can your doctors really depend upon your laboratory reports? —*G. Harvey Agnew, M.D., Department of Hospital Service, Canadian Medical Association.*

*In a Small Hospital*

# Modifying Professional Standards

By W. S. RANKIN, M.D.
Director, Hospital and Orphan Sections, The Duke Endowment

LET us assume, as we safely may, that the type hospital we are thinking about has a capacity of forty beds; that it has an occupancy of 60 per cent; that it has, therefore, 24 patients at the average time. About 14 of these patients will be surgical, 4 medical, 4 obstetric and 2 eye, ear, nose and throat. There would be about three fatalities a month. This hospital is in a town of from 2,000 to 10,000 people and is expected to meet the needs of a population in and about the town of from 25,000 to 40,000 people.

Practicing in this area are from 12 to 20 physicians, an average of 15, with perhaps four who graduated from medical colleges within the last ten years and have had from eighteen to twenty-four months of postgraduate hospital training. Of the group, one restricts his practice to surgery and probably one to eye, ear, nose, and throat work. All of the physicians, with the exception of the one doing surgery and the one engaged in eye, ear, nose, and throat work, do general practice. Of the 15 physicians who care for the population to which the hospital ministers, 5 treat 90 per cent of the hospital patients; 9 treat twenty cases or less in the hospital per year; 5 or 6 physicians treat less than twelve cases a year.

Let us turn now to some of the more important modifications in the generally accepted professional standards of hospital practice that must be kept in mind in the examination of the work of small hospitals.

### *Choosing the Staff*

In the selection of a competent medical staff lies the weightiest responsibility of a board of trustees of a small hospital. In the discharge of this responsibility the trustees are limited to about fifteen physicians within the service zone of the hospital, and, of these, five or six will be in charge of 90 per cent of the work of the hospital. In an urban community of from 200,000 to 500,000 people the medical staff is selected from a group of from 200 to 500 physicians.

As a rule, the trustees of the small hospital find it necessary, in order to interest the local medical profession in the hospital and to avoid creating factional interest, to place every physician in the community who is in good standing with his county medical society on the active staff. This limited selection carries with it a relatively greater responsibility for exercising control over the members of the staff, especially over those who are disposed to undertake major surgery. Under urban conditions, where the trustees can attach to their staff a sufficient number of physicians who have surgical experience, skill and reputation in the community, it is far more difficult for those with limited qualifications to attempt major surgical operations.

### *Who Should Have Surgical Privileges*

But where trustees have little choice in the selection of a surgical staff, adequate control over unwarranted surgical propensities must be exercised by the trustees. Surgical privileges should be limited to those who have had one or two or three full years exclusively in surgical training in a hospital of a definite number of beds, or to provide for the older men, to those who submit satisfactory evidence that they have performed not less than 200 major surgical operations within the last specified number of years, with a surgical fatality not exceeding a certain per cent.

Departmentalization of the medical staff is out of the question. There are only twelve to fifteen physicians in the community. Of these, five or six do 90 per cent of the hospital work. Only one, a surgeon, restricts his work to a special field. Moreover, a rotating service, with 90 per cent of the work performed by five or six doctors, cannot be applied to the small hospital, for two reasons. First, the staff is too small to rotate. There is usually but one surgeon and no full-time pediatricians and obstetricians among whom rotating service could be arranged.

Second, there is not a sufficient number of unassigned free cases for rotating service. In the small hospital with an average of 24 patients

there are 12 charity cases: 7 surgical, 2 medical, 2 obstetric, 1 eye, ear, nose and throat. From 80 to 100 per cent of these charity cases are assigned cases, that is, their treatment is arranged for by an employer or a friend, who asks his own family physician to take care of the case on admission.

A greater responsibility for supplying the board of trustees with a clear understanding of the professional work that is carried on in the hospital rests upon the medical staff of a small hospital than upon the staff of a large hospital. Trustees must know, understand and appreciate the character of the professional work. They cannot be interested unless they know what is going on. They cannot educate their community to appreciate and support the hospital unless they know something about its professional work. In a large hospital the superintendent carries on this work but in a smaller hospital the superintendent is, relatively speaking, unqualified to do so. Usually she is a trained nurse and not qualified to pass upon the merits of the professional work and interpret it to the board. This important function, therefore, should be assumed by the staff and carried out either through regular conferences with the trustees by the chief of staff or by a committee appointed by the chief of staff. The quantity and the quality of the professional work must be continuously kept before the trustees.

### *Three Reasons for Good Records*

No one who understands hospital work questions the value of medical records. All admit (1) that the record is the only proper evidence that the doctor examined his patient so thoroughly as to "warrant the diagnosis and justify the treatment"; (2) that it is the only sound basis for judging the professional work of the hospital; that it is as necessary as financial records to an auditor; (3) that it constitutes the basis of staff conferences.

While the supreme importance of the clinical record is admitted everywhere by hospital staffs, the greatest difficulty in a small hospital is to obtain cooperation from the staff in keeping good records. In the large hospital there is a hospital librarian with assistants; there are senior medical students and interns who can write a large part of the clinical records; there are residents who can review and supervise the writing of these records so that the routine and detail do not fall directly upon the physician responsible for the patient. His work is done for him by assistants and associates over whom he has control. But in a small hospital the doctor who treats the patient usually has to write his own record, and the doctors who treat most of the patients in the hospital, as a rule, are among the busiest men in the county.

In applying the standard, then, of good clinical records, the greater difficulty in the small as compared with the large hospital must be kept in mind.

It is important that the laboratory service be carried out under the professional supervision of some member of the staff who is directly responsible to the staff. Some recent graduate of medicine, with sufficient laboratory experience to justify him in undertaking this service, whose patients are few, may perform the laboratory work. If his time becomes fully occupied with the details of practice, provision should be made for the employment of a technician directly responsible to some experienced member of the staff.

### *A Safety Measure*

In a small hospital there are certain examinations that even a well qualified technician under professional supervision may not be qualified to undertake. Especially is this true of the pathological examinations of tissues, gross and microscopic, which should be required of every operating surgeon by the by-laws of the trustees as well as the by-laws of the staff. Surgeons who need no check to prevent their doing unnecessary operations should advocate and insist upon the enforcement of such a rule for self-protection, if not for better diagnosis. The hospital may not at the time have anyone on the staff who can be tempted to do unnecessary surgery. But it may acquire such a member. If the rule is operative before the event, disagreeable personal implications may be avoided. For such examinations the local hospital may arrange with some well qualified pathologist within twenty-five or fifty miles to serve as a consulting pathologist.

The x-ray services of most small hospitals are usually performed by some local physician, usually the surgeon. Somtimes a technician, working under the direction of a local surgeon, is employed. In the latter case, especially, a consulting radiologist should be provided.

The staff of a small hospital will discharge its responsibility for the administration of anesthetics by recommending to the trustees the appointment of an anesthetist to work under the direction of the one or sometimes two surgeons, the operating surgeon or surgeons assuming responsibility for the way the anesthetic is administered.

In a small hospital, with an average of not more than one or two major operations a day, 90 per cent or more of anesthetics should be administered by one anesthetist. When the administration of anesthetics is more or less equally divided among a number of persons, when referring phy-

sicians give their own anesthetics and receive a fee therefor, then the number of deaths during and shortly following operation, and the number of postoperative pneumonias and nephrites should be carefully scrutinized.

In discussing consultations the first necessity is to define a consultation, so as to distinguish it (1) from a discussion of a patient's symptoms or condition between physicians, (2) from a conference between two or more physicians about a patient's symptoms, (3) from references of a patient between members of a group clinic with their composite notes upon their findings, and (4) from the seeing of an individual patient by the attending physician and his associate. The orthodox understanding of a consultation is that it is a formal affair, requested in writing on a special form; that the examination of the patient must be thorough; that the findings of the consultant must be recorded. A consultation is of considerable rarity in the practice of many small hospitals.

Moreover, it must be remembered that 90 per cent of the work of small hospitals is performed by five or six men, of whom one is usually a physician restricting his practice to surgery and possibly one restricting his practice to eye, ear, nose and throat work. If the surgeon has a surgical condition about which he wishes a consultation, the other surgeon may be twenty-five to thirty-five miles distant, and the chances are even that the patient is a charity case. Consultations in a large city hospital, where there is a differentiated staff and where there is an abundance of available consultants to choose from, should far outnumber consultations in a small rural hospital, where available consultants are, comparatively speaking, few.

According to the American College of Surgeons, good hospital practice requires that from 15 to 20 per cent of patients passing through the hospital shall have consultations in the formal orthodox sense as above stated. Very few hospitals even approach that standard.

Certain conditions, even in small hospitals, demand a consultation. The staff should require a consultation before allowing any operative or therapeutic interruption of pregnancy or a cesarean section and also for all patients whose conditions seems to indicate an early and fatal termination. Here again, if a staff waits until an occasion arises, the adoption of the proper by-law might be embarrassing.

Any appraisal of the quality of the professional work of small hospitals based upon the percentage of consultations seems to me to be questionable.

The fatality rate in the Carolinas in hospitals of fifty beds and under is approximately 6 per cent. This means thirty-five to forty deaths a year or three or four deaths a month. Assuming that 15 per cent come to autopsy, this would mean one autopsy every two months.

In 90 to 95 per cent of the places where there are small hospitals of fifty beds and less, there is no one whose major professional interest is in pathology. The only person interested in an autopsy is the general practitioner or surgeon. Under the circumstances, the material for such an interest is too inadequate either to develop it or to sustain it.

The lack of autopsies is probably not due to any unusual opposition on the part of rural people to autopsies. A large hospital recently opened and patronized by the same group of people that patronizes the small hospitals, the rural people of the Carolinas, is now obtaining autopsies on practically 80 per cent of the deaths that occur in the hospital. Moreover, it has been observed that the association of a pathologist with a hospital of from 100 to 200 beds is usually followed by a tremendous increase in autopsies, even though such a hospital is patronized largely by rural populations.

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## Expense of Nursing Service

The largest single item of hospital expense is that of nursing care. This is quite proper since there is nothing that contributes more to the welfare of the patient than this service. Good nursing care requires well educated nurses. This education can be obtained only by years of study and work. Consequently, nurses are entitled to reasonable remuneration.

Is it not a reflection on good administration to insist that the nursing department secure nurses whose preparation qualifies them to perform complicated procedures and then assigns to them many menial duties requiring no special education and little experience? Surely a graduate of an approved school of nursing need not spend a large portion of her time carrying water pitchers, food trays, making beds or even taking temperatures, counting pulses and respirations. A few weeks devoted to concentrated training will prepare attendants for these duties. Attendants' salaries are much lower than nurses', therefore, economy can be secured by employing nurses for the more difficult and skillful duties and supplementing the nursing staff with trained attendants to relieve it of menial duties.

Another feature which will enable the hospital to make the most of its nurses' time is an adequate supply of equipment. Many hours a day are wasted if a nurse must rush from one division to another to borrow some item which should be on every division's list of equipment.—*Lucius R. Wilson, M.D., Sealy Hospital, Galveston, Tex.*

# The Weather Rooms—A Step F

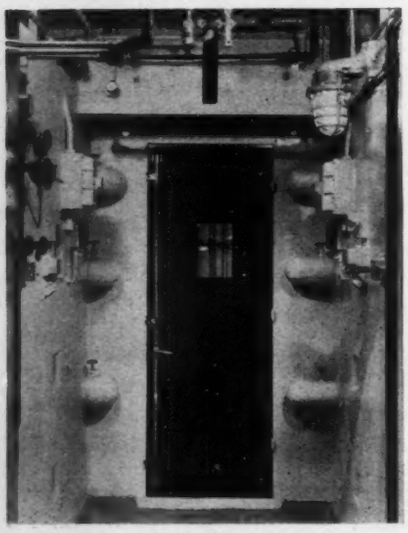
By ABRAHAM OSEROFF
Director, Montefiore Hospital, Pittsburgh

ABOUT a year ago a philanthropic friend of mine telephoned me and asked if I would stop in his office as he had in mind making a gift to the hospital. I was in his office at the appointed time, of course. For special reasons which he explained he desired to make an anonymous contribution sufficiently large to provide for the building of an oxygen chamber, fully equipped for use in the hospital.

I knew of oxygen chambers effectively used in certain hospitals of note. Those most familiar to me, however, were from the practical point of view of little use except for important experimental study. My friend must have been more than a little surprised when I evidenced no enthusiasm over his intended generosity. My reply was that the methods of oxygen therapy now in use at Montefiore Hospital, through the oxygen tent and the nasal catheter, seemed to satisfy all the clinical requirements of our staff for the various types of cases which come to our attention. As tactfully as possible the impression was conveyed that the oxygen chamber, while a nice acquisition for experimental and research work, for a good many reasons was apt to be a burden to the institution in its operation rather than an asset. My friend, however, still had his mind set on a contribution along the line which he had originally proposed.

To the heads of sixteen of the leading hospitals in this country was sent a questionnaire asking the following questions: Do you have an oxygen room in your hospital? Is it used extensively? Do physicians prefer it to tent or insufflation? How expensive is its operation compared to a tent? If funds were available would you favor installation of an oxygen room in your hospital?

Of sixteen replies three favored the oxygen room, thirteen definitely failed to see its advantage to the institution.



*Control room looking toward door leading to air lock. Note explosionproof type light fixture and switches and glass panels on side walls to observe brine coils.*

### *A Substitute Proposal*

Still, in these days when contributions of appreciable size have been so hard to find, an administrator's natural inclination to devise some way of satisfying the contributor and still rendering a maximum service to the institution promoted rigorous search for a method. It occurred to me that if it were possible to build oxygen rooms so that the finest precision for the control of oxygen therapy would be achieved within their walls while at the same time they would be so constructed as to be available for use as air conditioned rooms with filters of maximum efficiency for the treatment of allergic diseases, asthma, hay fever and the like, as well as various contact dermatoses, and if in addition the rooms so equipped could remain in appearance similar to the ordinary well furnished hospital room so that as a third possibility they could be used for regular hospital cases when not used for other purposes, then we might have full justification for the investment not only of valuable hospital space but for the money to be spent.

I told my friend then that I should like to check the practicability of the thought with architects and engineers as well as clinicians, and that if it was his desire to supply a sufficient sum of money to study and research, it appeared to me that amount annually for several years to be devoted to study and research, it appeared to me that some plan might be worked out.

Our architects, Schmidt, Garden & Erikson, Chicago, were given the job of drawing tentative plans for the building of two oxygen rooms to

# Forward in Oxygen Therapy

## *Rooms That Can Play a Variety of Roles*

accommodate two patients each, predicated on the flexibility in the use of the space which we are to devote to this purpose so that the rooms may be used selectively as oxygen rooms or as air conditioned and air filtered rooms or as rooms for ordinary patient occupancy.

After many conferences and much study along the lines indicated, there appeared no reason why the plan proposed should not be effective. The gift was accepted, detailed plans were drawn and construction begun. Because of the novel approach and because the space assigned for the purpose was necessarily limited by existing construction, it was necessary to design equipment especially for each purpose. In many instances this equipment had to be made to order and details of construction had to be determined anew from time to time. It gave us many a thrill when we were pressed to the point of finding a way out of a seemingly unsolvable difficulty.

### *Turning to New Materials*

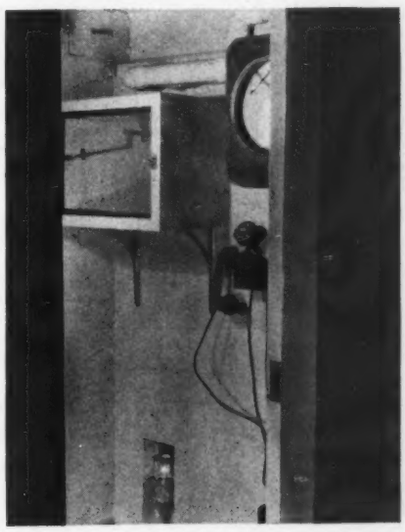
The treatment of the walls of the rooms, for example, presented one of our earlier problems. Oxygen rooms heretofore have been in reality enlarged airtight metal chambers. It was our thought that we should find some way of obviating the expense and cumbersomeness of this type of construction. Because our city is the center of the aluminum manufacturing industry, the thought occurred that if through double paneling, effective caulking and gasketing we were to make our windows, doors and frames airtight, then through the use of aluminum foil as the final covering on the walls we might obtain a wall as tightly sealed as a metal wall. The engineers, however, promptly turned down the idea of aluminum foil because of its high oxidizing quality. Out of this thought, however, came the idea which was adopted of using sheet lead foil two-thousandths of an inch in thickness as the final covering. It was applied to the wall with shellac. Over the lead foil were applied four coats of lead and oil paint.

Similarly a problem was faced when the lighting equipment was under construction. In oxygen chambers heretofore the lighting has always been outside the room. Our lighting, through the adoption of explosionproof fixtures, projects from the ceiling into the room as would an ordinary lighting fixture. Many such examples could be cited if space were available.

The accompanying photographs present perhaps more concretely than any word picture can the completed job.

The oxygen rooms are now in use. Aside from the availability of the rooms for the other purposes mentioned, the members of our medical staff are interested as they have never been before in the clinical application of various types of oxygen therapy. The rooms are, of course, used for research and study. Our tests thus far show them to be highly efficient. The loss of oxygen is comparatively small. We feel that we are at the point of developing a center to demonstrate the utility of such equipment not only clinically but from the point of view of economy of operation.

We are making an effort to control the loss of oxygen so that the cost can be brought down low enough to be readily bearable by any patient who can pay his way in any type of hospital accommodation. We feel that we are in position now to emphasize and encourage the earlier use of oxygen by physicians rather than waiting for a critical point in the condition of the patient when only



*Control room side of tray pass and partial view of temperature and humidity recorder. At the left bottom may be seen explosion-proof type night light.*

heroic measures can avail. We feel that we can make oxygen therapy readily available not only for respiratory and cardiac but for postoperative conditions.

Because of the recognition of the importance of accurate dosage and determination of atmospheric conditions such as humidity and temperature, we feel that instruments of fine precision for control of oxygen concentration in the rooms give an added advantage in treating the patient. This advantage warrants the effort and expense involved in developing these instruments of precision. Because most patients are still obsessed with the idea that oxygen is used only in stages of critical illness, we believe that there is great psychic value in treating a patient under conditions which are not recognized by him as special therapy for serious illness.

While oxygen of high purity has been available for some time at reasonably low cost, the methods of its administration in most hospitals have been such as to make its use practically prohibitive in cost to the average patient. We feel that through our close study of control and economy in the use of the gas, we may be in a position to bring the cost of oxygen therapy down to a minimum. At least, these are the aims which we hope to approach or achieve through this new construction.

# Problems the Architect Overcame

By CARL A. ERIKSON
Schmidt, Garden & Erikson, Architects, Chicago

AS SET forth by Mr. Oseroff, the objectives in the design of the oxygen rooms were to build rooms that could be used for oxygen therapy and at the same time be available for other types of patient care. But the clinical needs seemed to be diametrically opposed to one another. Oxygen therapy required an airtight room, and all others a liberal supply of fresh air. How build an airtight room that wasn't airtight? Oxygen rooms are most economical under natural circulation; conditioned rooms are best under forced circulation. Analysis, however, showed one common denominator — control of the atmosphere of the patient's room.

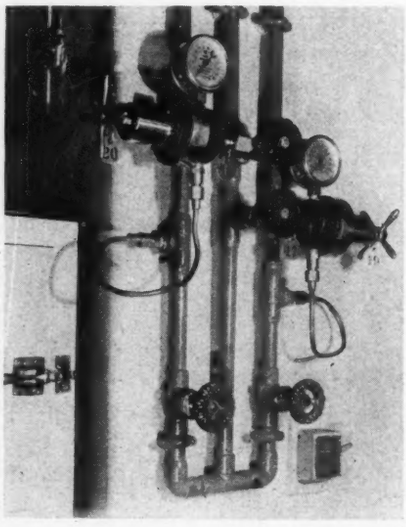
The space selected for conversion was approximately 34 feet long by 12 feet wide, in a space then occupied by a two-bed and a one-bed room and a sub-nurses' station. The rooms had plastered walls, terrazzo floors and base and the usual details of a well finished hospital.[1] Common sense dictated that as much of the existing finish and detail should remain as was possible.

The control room and air lock are placed between the two patients' rooms, one 12½ by 12 feet, the other, 14½ by 12 feet, just the original size. Thus it is possible to care for four patients in these rooms if desired.

The rate of oxygen consumption is much more importantly affected by leakage around openings and by traffic into and out of the room than by the size of the room, yet for the initial charge the larger the room, the greater the oxygen supply. That small price was gladly paid for the greater convenience and comfort of the larger rooms. To guard against possible (though improbable) leakage through the walls, and the certain leakage through minute and undetected cracks in the plaster, all plastered surfaces are covered with lead foil.

Two sets of oxygen tanks are located near the receiving room and piped to these rooms. When one set of tanks is emptied the valves of the other set open automatically and at the same time an alarm rings in the engine room.

The cooling of the room is by means of three



*Oxygen supply piping in control room; oxygen supply line valve to oxygen regulating flow valves (17 and 18); oxygen regulating flow valves calibrated in liters per minute (19 and 20). Two bottom wheel handle valves are bypass valves which enable quick charging of the rooms.*

[1]Montefiore Hospital Embodies Striking Structural Features, The MODERN HOSPITAL, July, 1927, p. 57.

sets of brine coils, placed in a recess behind a panel in each room. One set will maintain the required temperature; the other two being used only for the initial cooling and to permit defrosting. A tray for soda lime is installed above the coils if that is found to be necessary to reduce the carbon dioxide content of the constantly recirculated air.

The warmer air at the top of the room enters the coil chamber at the top, and as it is cooled drops to the bottom and so into the room. Directly across the room a radiator connected to the summer heating system heats this cold air and starts it on another cycle. The temperature is controlled through thermostats on the radiator and cooling coils. The patient enters the room through the corridor door; the attendants via the control room and air lock; meals via the tray pass in this control room. All doors to the patient's room are made tight by gasketed frames and three-point locking devices.

The usual window sash are supplemented by special but removable sash fitting against gaskets. To ensure safety during its use as an oxygen room, all precautions suggested by safety engineers were incorporated — explosionproof electrical receptacles, lights and nurses' signal switch. As the photographs show, these special devices are not objectionable in appearance.

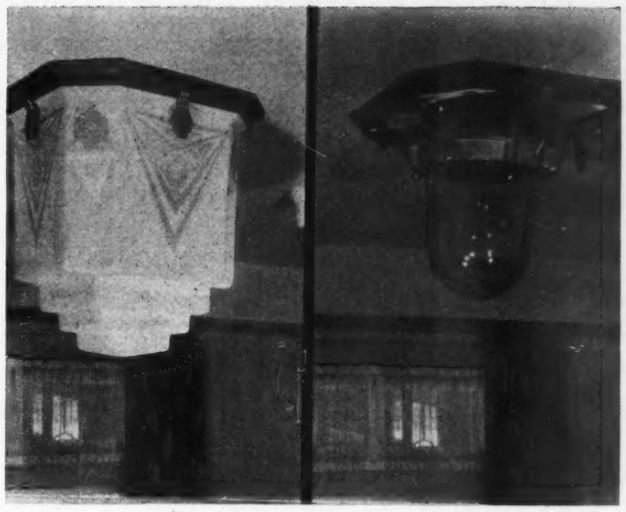
*Same Room in Other Guises*

To use the room as an air conditioned room, no change is made other than to drain the water seal in the duct system and to start the fan suspended on the ceiling of the control room. It drives the air upward over the same cooling coils used in the oxygen therapy. The upward movement ensures uniform distribution of the cool air over the entire room. The amount of outside air and recirculated air may be regulated at will.

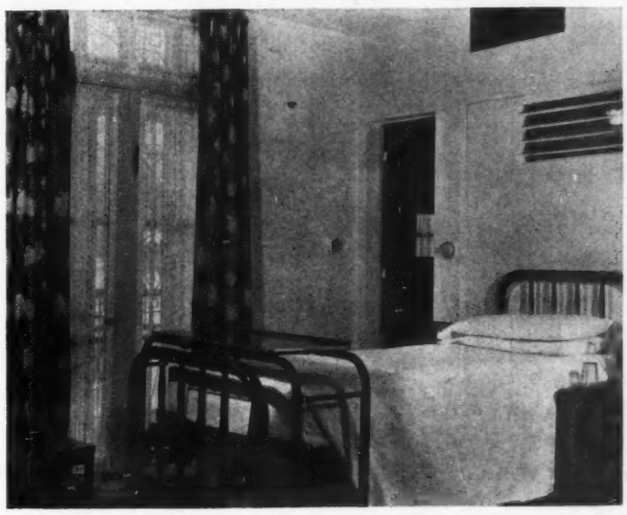
When a pollenfree or dustfree room is wanted, only one additional precaution is necessary, namely, to ensure that the special paper filters are in place so that every bit of air entering the room must pass through them. Presumably when a room is being used for allergic and similar cases, every precaution used in entering it to prevent oxygen escaping will be followed to prevent dust and pollen from entering. During its use as an air conditioned room these precautions are probably unnecessary, so the corridor may be used in the ordinary way.

Finally, when the rooms are used for all ordinary purposes, the extra sash at the windows are removed, and the control room and air lock disregarded.

The control room is not only a passage but an

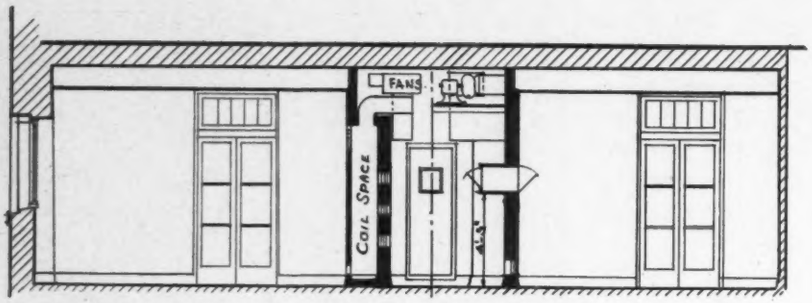


*Explosionproof lighting in the oxygen rooms.*



*Oxygen room as a typical hospital room with little to differentiate it from any other room. Windows have storm sash fitting against gaskets used only when oxygen is being used in the room. The big panel behind the bed covers the brine coil chamber.*

*The manifold is subdivided into two banks of five cylinders each, with automatic operation alternately.*

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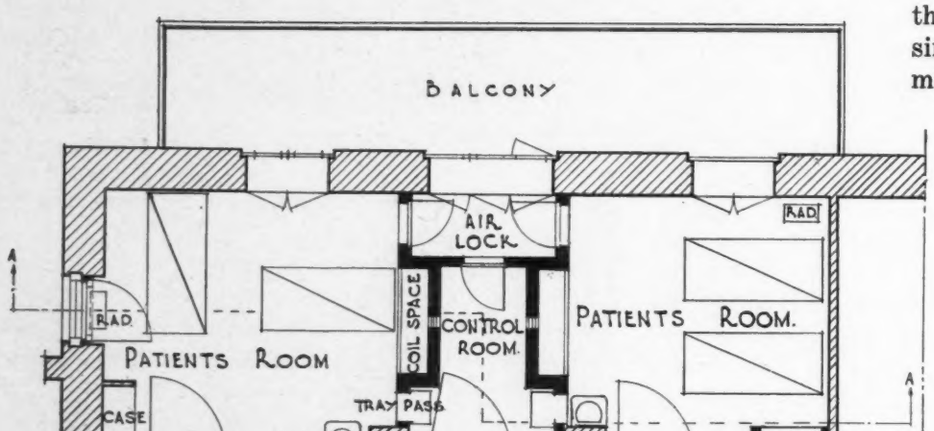


*Plan showing the arrangement of the weather rooms.*

observer's stand, a workroom, a control room and a machine room. Here are the valves that control the oxygen supply, the dampers on the air supply, the recording thermostats and humidostats, and on its ceilings the fans and ducts.

The rooms are designed to permit their use as oxygen therapy rooms with automatic control of the humidity and temperature, as pollenfree and dustfree rooms, as air conditioned rooms under the same conditions, or as ordinary patients' rooms. Each room may be used for a different purpose. Gases other than oxygen may be readily used if desired.

While it may seem that these rooms meet enough different conditions, yet serious study was given to the possibility of creating a slight vacuum in them, so that a rarefied atmosphere similar to a mountain top might be produced. While the mechanical difficulties were considerable, yet they were not insurmountable, but the clinical applications seem to be too limited to justify the additional equipment. If we added to this the lamps that simulate sunshine, one could here produce the aridity of the Sahara, the humidity of an Amazonian swamp, the rarefied air of Pikes Peak, the temperature of Aden or of Medicine Hat — truly all weather rooms.

The finished results are due to the helpful and understanding cooperation of Mr. Oseroff in meeting many trying problems and in always holding high the standard of achievement. J. I. Banash, Chicago, too, gave freely of his wide experience — not only in oxygen therapy installations, but in safety measures.

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## Bristling at Criticism

It is not only animals that bristle. Their instinct for it, however, is more discerning than that of human beings. Even where the instinct is true, bristling doesn't get the bristler anywhere — except into fights. It not only provokes antagonism, it blurs judgment.

Loyalty to one's hospital, department or personnel is an excellent attribute, but it should carry with it sufficient confidence to make it possible to hear criticism without bristling. One of the greatest obstacles to improvement of service in any one department, or in a coordinated whole, is a department head who bristles when an individual, a method or an incident in the department is called in question."

Whether criticism comes from a patient, the family, a doctor or another department head, whether it sounds possible or incredible, reasonable or ridiculous, the response should be the same: "That certainly does not sound right. I will investigate immediately. Thank you for bringing it to my attention." Having made this response, the matter should then be investigated, and a report made to the person making the criticism. What is said to this individual at this point is not pertinent to the subject. Whatever it is, it will be better received because of the original open-minded response, and, what is more important, the way will be open for future friendly questions. Departments most ready to listen to complaints are most likely to be well run, and contribute most to the good will which is the foundation of successful service.

Don't bristle. — *John R. Howard, Jr., Muhlenberg Hospital, Plainfield, N. J.*

# A Year of Reorganization in a Municipal Institution

By MAXWELL LEWIS
Superintendent, Home for Dependents,
Welfare Island, New York City

*The story of a politically ignored institution and its rebirth under a humane and medically minded local government*

IN THE early months of 1934, soon after Dr. S. S. Goldwater assumed the direction of the municipal hospitals of New York City as commissioner of the department of hospitals, the city and the nation had occasion to read of certain charges of neglect and laxity of care accorded the occupants (we call them guests) of one of the largest municipal institutions—the Home for Dependents. This article deals with the year that has followed and the efforts expended to reorganize the Home for Dependents in accordance with the expressed desires and humane principles of Doctor Goldwater.

Faced with an unbelievable situation upon his first visit to the Home for Dependents housing two thousand guests, of whom 80 per cent were chronic ill, and finding that there was not a single physician attached to the home, or a competent graduate nurse on the staff, Doctor Goldwater immediately called into conference the medical board of a near-by hospital, appointed it to act in the same capacity for the city home, employed four physicians, four graduate nurses and a laboratory technician. The new medical board immediately drew up a set of rules and regulations governing the medical care and nursing service for the guests, inaugurated out-patient clinics and installed two infirmary wards, one for males and one for females. Then a new superintendent was appointed.

### *Four Groups of Problems Are Faced*

This was a beginning, but the new superintendent was faced with a number of problems. He analyzed the problems and found they formed themselves into the following general divisions: (1) adequate medical care and nursing service; (2) adequate information and check-up of all activities; (3) proper staff and personnel organization; (4) safety and comfort of guests in the institution.

His first problem was adequate medical care and nursing service and his agenda was as follows:

1. Organization of regular medical staff meetings. The four physicians were called to their first staff meeting. Each was given a copy of the rules and regulations which were read through and digested thoroughly. To each was assigned definite medical duties. Questions and problems of medical and nursing care were discussed. Minutes were taken of this meeting and of each meeting that has followed. The minutes of these meetings are a part of the medical record of the institution.

2. Medical charts were inaugurated. One of the new regulations called for a medical, physical and mental examination of each guest. Accordingly as each was examined, a medical chart was started. Proper hospital procedure was followed in the recording and filing of the charts.

3. Medical board meetings were begun and are held regularly thereafter once each month. Minutes are taken of the meetings and become a permanent record of medical and nursing care.

4. Records of out-patient service and statistics were instituted. These records tell an interesting story, indeed, of medical conditions in a home for the aged and destitute.

5. A supervisor of nurses in charge of the new nurses and of the attendants and orderlies was appointed. Further control and supervision of medical and nursing care was thus ensured.

6. A record librarian to maintain proper medical records and statistics was employed. Thus an additional check is kept on good medical and nursing care.

7. Regular conferences of attendants, nurses and orderlies were started. Here, too, minutes are

kept of the meetings and are a permanent record. Problems of nursing and custodial care are discussed. The welfare of the guest is the paramount subject. The agenda for these meetings is somewhat as follows: (a) Reading of minutes of previous meeting (3 to 5 minutes). (b) Short talk on chosen subject (10 minutes). These talks are given by the heads of each department upon certain relations existing between the nurse, attendant or orderly and the particular department, for example, the dietitian—"How the nurse and attendant can help to improve food service." (c) Discussion, questions relating to talk (5 minutes). (d) General discussion of problems as they arise during the week, the chair presenting problems. (e) General discussion of problems, the nurses, orderlies and attendants presenting problems (40 minutes).

8. Weekly classes were started for nurses, attendants and orderlies in which they are taught more fully the better care of the guests. These are held under the direction of the supervisor of nurses. Some of the subjects taught are—structure of the human body; baths—tub, shower and foot; care of wards, furniture, furnishings and other equipment.

9. Regular reporting to check medical and nursing care was a thing unknown at the city home. It was necessary, therefore, to institute the following for that purpose: (a) physician's twenty-four-hour medical report; (b) supervisor of nurses' day and night report of condition of inmates in infirmaries; (c) accidents; (d) doctors' time book; (e) nurses and attendants on and off duty.

10. Medical surveys of all guests were undertaken and each individual diagnosed. Each guest was given a thorough physical examination and his condition was diagnosed and properly classified. As a result, other distinctive wards were established, namely, separate wards for epileptics, for advanced cardiacs and for those afflicted with leg ulcers. Also, a special diet kitchen was established to take care of those diagnosed as diabetic.

The medical and nursing service continues and each day reveals more and more its great need in the city home.

### *There Was a Funny Side*

The solution of the second problem was not without a bit of humor. Having made a thorough tour of inspection throughout the grounds, buildings and wards previous to his appointment, the new superintendent started his first day in his office in a manner of routine. Asking for the regular daily reports, he encountered a pleasant, smiling secretary who handed him a single sheet of paper indicating the census, admissions and discharges for the previous twenty-four hours and beamed triumphantly. Inquiring if this constituted the extent of the daily reports, he was informed that his assistant received the ward, watchmen and time books and was regarded with amazement when he asked to see the books also. The important information contained in these books—there were about sixteen of them—was the capacity of the ward, that there were one, two, or no vacant beds, that "all guests were comfortable," and that Miss So and So was off duty from two to four and was relieved during her absence by Miss A.

The lack of adequate reports was unbelievable. The superintendent of the city home has under his supervision sixty-one buildings. The guests number close to two thousand men and women and the personnel approximately three hundred. Yet the daily pulse of all activities was practically untouched by these scanty reports.

### *Reports to Be Submitted Daily*

It was essential immediately to devise a check list, first, of daily reports. Each division head was informed of the daily reports which were to be submitted to the superintendent each morning before nine. The following is the check list: night supervisor's report; watchmen's reports—rounds and dial cards; report of daily admissions and discharges; medical reports of resident physicians; chief nurses' report of male and female divisions; daily census sheet of admissions, discharges; transfers, deaths, in detail; report of accidents; report of missing persons; report of the laundry; engineer's report — plant maintenance; doctors' in-and-out book; report of property clerk; report of receipt of merchandise; daily menus.

In addition, all official correspondence carried on by the heads of divisions with outside agencies was ordered to be submitted to the superintendent for his perusal and approval.

As time progressed other check lists of weekly, monthly, quarterly, semi-annual and annual reports were established. The superintendent's secretary fortified with a complete schedule now keeps close watch over all reports and is quick to inform the superintendent of any delinquency.

In addition and as a further aid in keeping informed of all activities, regular rounds of all departments were instituted. The assistant superintendent and the supervisor of nurses keep separate records and make separate reports. Constant watchfulness has done much to safeguard the welfare of the guest.

Almost simultaneously the new superintendent began tackling his third problem—personnel and staff reorganization. He found an institution but no organization. He found personnel with duties and responsibilities but no responsible personnel. He found something of a staff but no real directing force.

An analysis of each pay roll position was made and definite functions and duties were assigned to each individual and a card recording these functions and duties was established.

*Reorganization Plan Proceeds*

The first meeting of the staff indicated clearly that the divisions of the institution were not sufficiently defined and the personnel adequately supervised. The staff at the first meeting, in addition to the superintendent, consisted of the nurse in charge of the male division, a nurse in charge of the female division, the assistant superintendent, the social service director, the steward, the dietitian and the engineer. There were other divisions and activities in the institution which were not represented and there were activities which were to be created which needed representation on an administrative staff.

Accordingly, reorganization plans proceeded and there evolved the following scheme of staff organization to cover all phases of activity.

| *Activity* | *Staff Member* |
|---|---|
| Chief Administrative | Superintendent<br>Assistant Superintendent |
| Nursing and Custodial Care | Supervisor of Nurses<br>Assistant Supervisor of Nurses |
| Medical Care | Senior Resident Physicians (newly created) |
| Medical Records | Record Librarian (newly created) |
| Social Service | Director of Social Service |
| Occupational Therapy | Director of Occupational Therapy (newly created) |
| Recreation | Director of Recreation (newly created) |
| Business Management | Steward |
| Dietary | Chief Dietitian |
| Housekeeping (newly created) | Chief Housekeeper (newly created) |
| Engineering (Plant Maintenance, Heat, Light, Power) | Engineer |
| Night Administration | Night Supervisor |
| Religious | Chaplains, (Protestant, Catholic and Jewish) |

Regular monthly meetings are held and, among other things discussed, each staff member presents a written monthly report which becomes part of the minutes of the meeting. This staff reorganization has clarified responsibility and ensured supervision of personnel.

All of the buildings housing the guests of the home are old, insanitary and veritable fire traps. Incessant watchfulness, instruction and care are needed to ensure the safety and comfort of the guests. The program of the year to surmount the plant difficulties was as follows:

1. Devisement of new fire rules and regulations.
2. Strict enforcement of fire rules and regulations.
3. Frequent fire drills.
4. Constant watchfulness over fire fighting apparatus.
5. Extensive repainting.
6. Extensive repair.
7. Strict adherence to principles of cleanliness in wards and buildings and on grounds.
8. Contests among attendants, orderlies and nurses to devise lists of fire and accident hazards.
9. Correction of these lists of fire and accident hazards.
10. Building of safeguards to avoid automobile accidents. (Auto and truck roads run through grounds.)
11. Surveys and studies to correct quality and quantity of beds, mattresses, linen and towels, blankets, clothing (outer and under), furniture, food and food service, food service utensils and equipment, washing and bathing facilities, personal cleanliness, tobacco.
12. A grievance committee made up of the heads of several departments to receive, investigate, report and recommend correction of all complaints.
13. Re-assignment of guests in wards so that the less able are housed on lower floors.
14. The abandonment of two of the worst fire trap wards and the removal of guests to other quarters.

Thus have been expended sincere efforts to reorganize one of the municipal institutions in New York City. The task is to maintain that which has been achieved and to keep always alert for new things that need correction and to remember that every day brings new experiences and new problems to solve.

An executive may profitably keep in mind the problem of the frog which fell into a thirty-foot well and each day climbed up the side of the wall three feet only to slide back two feet at the end of the day. Every once in a while a problem which was considered solved appears again and again to belabor a watchful executive.

# The Hospital and the Radiologist

By R. C. BUERKI, M.D.
Superintendent, State of Wisconsin General Hospital, Madison

DURING the past two years there has been considerable discussion as to the relationship that hospitals should maintain with radiologists.

The main consideration must, of necessity, be the patient. Anything that is for his ultimate benefit must be our major aim.

There are but 1,500 men in the United States that can actually qualify as radiologists. These men are, in the main, in the East and in other centers of population. Statesmanship demands that we do not deal with certain sections, but that we view the problem of the country as a whole. Standards that may be applied to New York City and Chicago should not be imposed upon the entire country until there are men adequately trained to meet the needs of all the people without materially increasing costs of medical service or at least until the public is adequately educated to realize the value of the specialist.

### *Radiologists, Take Note*

It might be well at this time to review the conditions existing in ophthalmology. Despite the opposition of the ophthalmologists, most states have licensed by law a special group of practitioners, the optometrists, to do refractions. The number of ophthalmologists in the country is too small and their distribution is not sufficiently general geographically to make it possible for them to carry more than a fraction of the needed eye work. This should be a warning to radiologists that a similar condition may face them.

Every licensed physician has the legal right to carry on any form of diagnosis and treatment. He is likely to short circuit roentgenologists if there is a professional or an economic reason for him to do so. This is not a matter which the radiologist or any hospital group can control.

Any proposal which increases x-ray costs to the average patient will arouse the unthinking antagonism of the public. In the end this may easily become disadvantageous to roentgenologists and detrimental to the public.

Radiologists are asking that they be placed on the same professional basis as the surgeon, the internist or any other specialist. If by this they mean that they do not want to be considered glorified technicians, I heartily agree with them. I do not believe that there is a thinking member of any hospital staff or an administrator in the country that is not willing to grant this professional recognition. I for one believe that the practice of medicine, in the special field of roentgenology, should be performed only by qualified physicians who have specialized in their field and that the relationship of the radiologist to his patients should be as nearly as possible the relationship that exists between the specialist in other fields and his patients. The radiologist should deal with the patient through the family physician. This will materially strengthen his consultant relationship.

When the radiologist states that the only way he can gain this professional recognition is to place his services on an individual fee basis, I cannot agree with him. I have talked to radiologists from one coast to the other and when they are granted equal status with other specialists many of them feel that the method of remuneration can well be a basis of individual agreement.

We find that the prevailing practice among hospitals of the highest grade varies in different parts of the country and within the same city. We find salary, fee and commission bases and combinations of these. I believe that I am in favor of the fee basis of remuneration for specialists rather than either of the other two methods, namely, salary or commission. However, in reviewing the principles of ethics of the American Medical Association, I find nothing opposed to remuneration in the form of salary, fees or commission.

Certain it is that the specialist, be he surgeon, urologist or roentgenologist, who steps into a position on a salary basis, finds his clientele waiting for him (a clientele which gives him a virtual monopoly) and a remuneration that is certain. His is not the lot of many equally well trained specialists who struggle and starve to win for themselves that fair proportion of patients.

The remuneration of the radiologist should be adequate and on the same level as specialists whether this remuneration be in the form of salary, fees or commissions, and no substantial profits over and above the reasonable cost of maintaining the department should accrue to the hospital. The patient must not be exploited through excessive fees.[1]

[1]From a paper read at the meeting of the American College of Radiology, Chicago, February, 1936.

# Two Years With a Tumor Clinic

*What can you do about the patient who doesn't want to be helped? The patient who disappears purposely? The patient who prefers the get-well-quick-specialist? "Follow-up" says the Charity Hospital Tumor Clinic*

By LOUISE MEYER
Social Worker, Charity Hospital, New Orleans

THE tumor clinic of Charity Hospital, New Orleans, started in September 1933, and one month later had its own social worker who's function consisted mainly of following up patients attending the clinic.

In analyzing the patients some of the important aspects of medical social work were brought into play, such as, interpretation to the patient, his family, and various agencies of the need for treatment, and assistance to the patient, his relatives and any interested agencies in planning for the recommended treatment. As all patients who have ever reported to this clinic have been followed until death or discharge, follow-up has been one hundred per cent in spite of the lack of a social worker in the beginning.

The follow-up routine begins with an interview on the first clinic visit of each patient. This interview is valuable not only for establishing good contacts with the patient and his relatives, but it also provides an opportunity to uncover such social problems as family friction, adjustment to diagnosis and need for relief or for placement in an institution.

An average of from five to ten patients fail to report on each clinic day. As soon as any patient fails to report as advised a follow-up note is sent. If no answer is received, and if the patient still does not return, a home visit is made to determine the reasons. Those patients not living in New Orleans receive two follow-up letters and if no reply is sent an agency such as the American Red Cross, the parish health unit, or the parish emergency relief administration is asked to contact the patient.

The reasons given for failure to return to the clinic include physical inability to make the trip, misunderstanding as to return date, lack of car fare or train fare, and the long period of time required for courses of deep x-ray therapy. This last reason accounts for the failure of many out-of-town patients to complete a series of deep x-ray therapy, and coupled with lack of car fare and train fare is the most important.

In spite of the fact that no charge is made for any treatment, the car fare necessary to receive courses of deep x-ray therapy is large and the majority of patients receiving deep x-ray therapy find it difficult to pay out of their small incomes the amount necessary for clinic visits. It was arranged for all those patients receiving direct relief from the Emergency Relief Administration (now the Federal Emergency Relief Administration) to be given car fare to come to the clinic.

### *Transportation for Non-Relief Patients*

For those patients unknown to the ERA, some other provision had to be made. Those not able to come on the street car have been called for in the social service department car; this, however, is not a satisfactory arrangement because only a limited number can be cared for in this way. Car fare for those able to make the trip on the street car has been provided in some cases by the social service department, but this is expensive and again only a few can be given this relief. As the social service department has no funds for relief, $1.50, which is the approximate cost per patient for one course of deep x-ray therapy, cannot be provided for many cases.

One colored woman of sixty-three was reporting to the clinic twice a week to have her wound dressed, once a week for physiotherapy, once a week for deep x-ray therapy, and once every two weeks to the tumor clinic. The set-up at Charity Hospital is such that rarely can two clinics be attended on the same day. As the patient required an attendant, 84 cents was being spent for car fare one week and $1.12 every other week. With a weekly income of $3.50 which had to cover rent, food and clothes, such an allotment for car fare was a large item to be budgeted. In order to decrease the patient's trips to the clinic, it was arranged for the necessary dressings to be done by a visiting nurse of the child welfare associa-

tion. Sterile gauze for the dressings was supplied by the social service department.

Observation of patients living outside of New Orleans is often delayed several weeks because the patients are without funds for transportation to the hospital. There are only two relief agencies common to all the parishes in Louisiana: the ERA and the American Red Cross. The ERA will pay the transportation of only those patients who are the clients of the agency or whose families are registered with it. The parish American Red Cross chapters will arrange for half-fare transportation to New Orleans by train or bus, but as all chapters have minimum budgets for relief no actual money can be advanced. This situation forces these patients, who are not on the ERA to put off reexamination until some member of the family obtains enough money above maintenance to provide transportation. This applies not only to patients returning for observation, but also to those returning for courses of deep x-ray therapy.

Patients reporting back for successive courses of deep x-ray therapy are not admitted to the hospital while treatment is being received. Placement for white patients can be secured at the New Orleans Convalescent Home, Home for Homeless Women or Volunteers of America. The Bureau of Transients, the only agency providing care for colored patients, is no longer available.

*Keeping Patients Reporting Regularly*

From September, 1933, to September, 1935, 709 patients reported to the tumor clinic. In an attempt to keep these patients reporting regularly for treatment it was necessary to make approximately 720 follow-up visits and to send out approximately 2,400 follow-up letters. Of the 709 patients, 186 died and 256 were discharged. No patient with a positive biopsy is ever discharged from the clinic. Of the 256 discharged, four were lost and two refused to report for treatment. Incorrect addresses were responsible for the loss of the four patients, all from out of town. Letters to them were returned unclaimed and agencies were unable to trace them because the available information was incorrect and insufficient.

One of the patients who refused to return to the clinic had not permitted a biopsy of a lesion of the lip to be performed and a definite diagnosis of malignancy was not made. This patient claimed that she was reporting to a private doctor, but as she refused to give the physician's name the statement could not be verified.

A biopsy was taken on the other patient who refused treatment and chronic cervicitis was reported. In view of gross characteristics of the growth, however, it was thought that observation should be continued. The patient had no complaints and could not be made to realize the importance of returning to the clinic. Both our efforts and those of an agency which agreed to furnish transportation to and from the hospital failed to persuade the patient to report.

Of the 267 current cases, 54 were not receiving treatment or attending clinic regularly. Sixteen were too ill to report and terminal care was arranged at home.

*Arranging Terminal Care in the Home*

To provide terminal care at home, general nursing care was secured through the child welfare association and opiates were obtained through the Sickles Fund or at cost through local drug stores. On account of the lack of facilities in the community, terminal care could be arranged for usually only at home. Of the institutions in New Orleans only the Maison Hospitalière, Little Sisters of the Poor and Touro Shakespeare Home accept cases of malignancy. For admission to all three the patient must be white and sixty or over, and he must be ambulatory to enter the Little Sisters of the Poor. The Maison Hospitalière, which admits women only, will accept bed cases but as a fee of fifteen dollars a month is charged, this does not relieve the situation. Residence in Orleans Parish is a requirement for admission to the Touro Shakespeare Home and since Charity Hospital draws patients from the entire state, most of the cases referred for terminal care are from outside of New Orleans.

There is no provision in the community for terminal care of Negroes. Although it is frequently stated that terminal care of patients in malignancy is often best provided at home, it seems unreasonable, for example, to insist that a family care for a patient who has nasal regurgitation following the ingestion of food or fluids.

Of the remaining 38 patients not receiving treatment, 15, 13 of whom were cases of malignancy, definitely refused to report for observation and further treatment. In all of these cases symptoms disappeared following treatment and the patients could not be made to realize the necessity of regular examinations by the clinic. In order to keep them under observation, the patients were contacted every one to three months depending on the type of malignancy. Patients living in New Orleans were visited and those living outside of New Orleans were contacted by an agency or by a local physician. Nine patients, 4 of whom were cases of malignancy, were de-

linquent and agencies arranged for their return.

During the two-year period, 7 patients moved from the addresses given in the clinic and attempts to locate them were successful in only 3 cases. The following example illustrates the difficulty of tracing patients who have moved. One patient, with a diagnosis of basal cell carcinoma of the face, moved without notifying his former rooming house or the post-office of his new address. Contacts in the neighborhood revealed that the patient was supposed to be living on the 1100 block of South Rampart Street and that his daughter was attending the Jackson School. The patient could not be found at the address on South Rampart Street and the daughter was not registered in any of the city's public schools. The patient was not listed in the city directory or with the social service exchange. It was learned through the patient's brothers and mother in Texas that the patient never visited or wrote them, but he was reputed to be living at 1118 Prytania Street in New Orleans. That address, however, proved to be incorrect and the patient was not known in that block. Through continued periodic contacting of mother and brothers, the patient's address was finally secured and observation was resumed.

Another patient, with a diagnosis of squamous cell carcinoma grade 3-4 of the tongue, lived in a home for the aged in New Orleans. As soon as the first course of deep x-ray therapy was completed, the patient was permitted to visit relatives in one of the outlying parishes. He did not go to the relatives, however, nor did he return to the institution. A lawyer engaged by the relatives to trace the patient could not secure any information in regard to his whereabouts, and they finally decided that, in view of an often repeated threat about not caring to live after a certain age, he must have committed suicide.

*Patient Postponements of Operations*

Four patients, all of whom were cases of malignancy, were found to be residents of Mississippi. This was not discovered, however, until after treatment had been received. As Charity Hospital can treat residents of Louisiana only, arrangements are being made for observation to be continued in Mississippi.

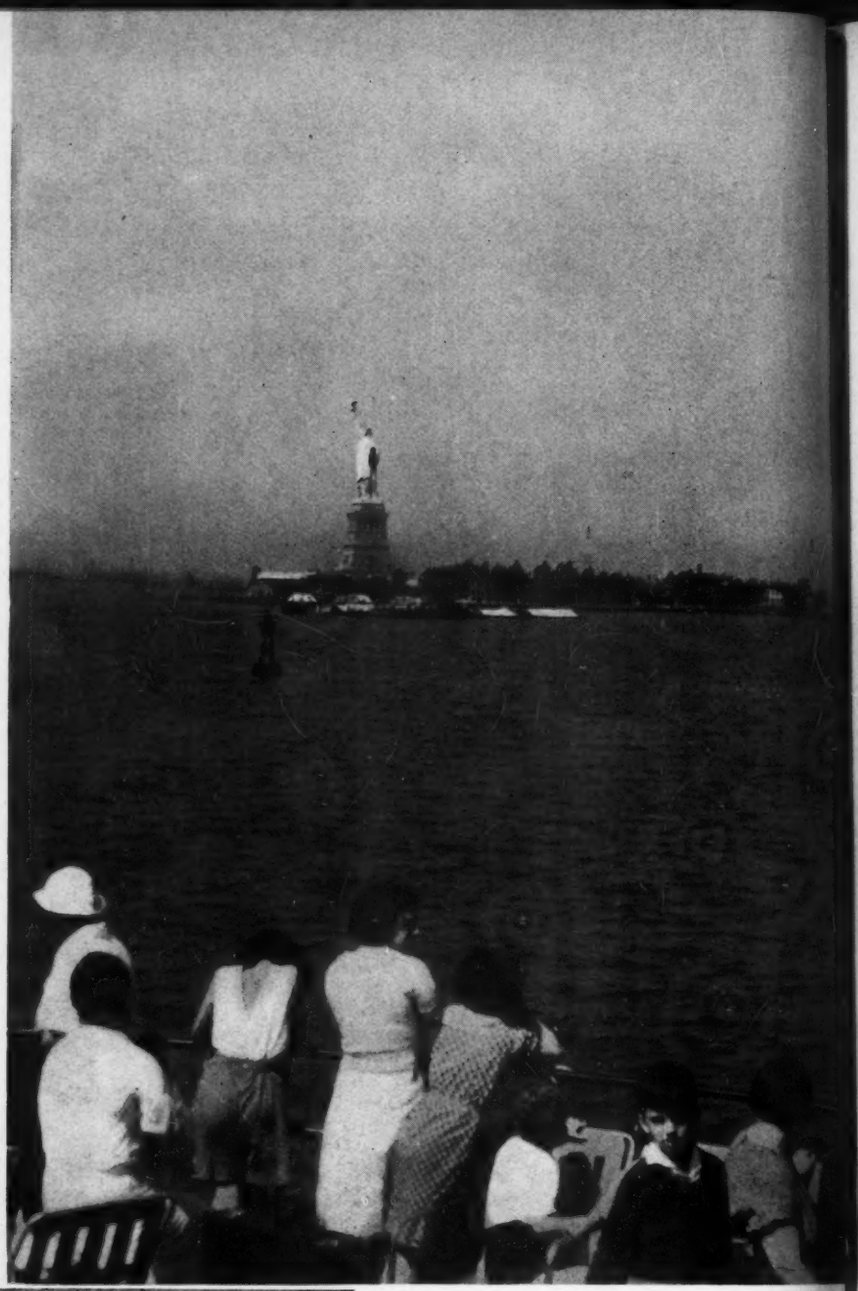
By September, 1935, it had not been possible to arrange for 3 patients to be admitted to the hospital as advised. In one case, that of a twenty-five year old Negro woman, hospitalization was advised for removal of a lump in the right breast which was thought to be chronic cystic mastitis. Four months before a similar lump had been removed from the left breast and a histologic section showed chronic cystic mastitis. The patient deferred admission because she experienced no discomfort and because hospitalization would interfere with her work. It is planned to discuss treatment with the patient's employer and it is thought that some arrangement can be made whereby the patient's job can be kept until she is ready to resume work.

Another patient, a white woman, thirty-three years old, was given a tentative diagnosis of fibro-adenoma of the breast. Care of a five-year-old daughter kept this patient from immediate admission to the hospital for biopsy, where, if malignancy were found, radical surgery was planned. The patient had no relatives and she refused to have her husband's relatives provide care for the child even if this could be arranged. Neither patients nor husband would consider institutional or foster care. Their income did not permit foster care, a housekeeper or a nurse at home. While efforts were being made to persuade the patient to agree to one of the suggestions offered, the patient had a rapid succession of colds. The child had two colds associated with otitis media, followed by scarlet fever and measles. At present the child has possible pertussis and the husband is also ill.

*Competition From "Cancer Specialists"*

The third patient was a fifty-five-year-old white man with advanced carcinoma of the cheek. Before applying to the tumor clinic this patient had been treated in various ways. One course of treatment consisted of a series of "vaccine" injections three times a week at three dollars an injection. When this "vaccine" proved too expensive he decided to come to Charity Hospital. The growth was advanced but it was thought that an application of radium would benefit the patient's condition. He, however, was interested in treatment which promised a cure and he refused radium. All further explanations to the patient through his family were fruitless. In spite of protests, this patient made a trip to Picayune, Miss., in order to be treated by a "cancer specialist" who promised to cure him after three applications of his salve or paste. Only one application has been received so far, but the patient claims that the pain is greatly decreased. Sloughing, however, is much worse. The "cancer specialist" has an imposing list of people whom he has cured and who he suggests may be contacted before any new patient decides to undergo treatment. This "specialist" is anxious to demonstrate the efficacy of his medicine before any group of doctors who will grant him a hearing.

# The Hospital Sails the Seas



*In addition to the floating hospital for children built by St. John's Guild, Seaside Hospital beside New York's Lower Bay is also maintained by the Guild. This is an institution of 190-bed capacity.*

THEY come on board at the Battery, women and children of New York City's tenements, needing sun and fresh air and rest, and the great hospital ship welcomes them on to its sun deck and into its roomy cool cabin where chairs and hammocks await mothers and babies.

Slowly the ship starts out to sea, salutes the Statue of Liberty and sails down the Bay on its daily thirty-mile trip to Sandy Hook. During this time the sun deck, with its brightly colored flags and general air of festivity is apt to be a hilarious spot,

but it quiets down soon enough, and the seriousness of eating sandwiches and drinking milk furnished by the ship is recognized with solemnity by each small passenger.

Built by St. John's Guild and presented to the city, this ship is the fourth of a string of similar ships operated by the Guild since its founding over sixty years ago. It is licensed to carry 1,500 persons and equipped to feed them. Tanks carry 18,000 gallons of water for use in bathing the children, and a doctor and several nurses are in constant attendance.

Fireproof and with twenty-five water-tight compartments, the ship is described as practically unsinkable, for her construction is such that she will remain afloat by means of sponsons even if her entire main hull should be destroyed. The ship is fully equipped with life boats and rafts and life belts.

# Group Hospitalization Pays Doctors' Fees

By ALTON OCHSNER, M.D.
Department of Surgery, Tulane University of Louisiana

MUCH has been said and written about the increased cost of medical care and the burden it has thrust on the "white collar" class of patients. As Mark Twain said about the weather, "Everyone talks about it and yet no one does anything about it." Such indeed has been the case as regards the high cost of medical care.

Medical costs can be subdivided into two large groups: (1) that paid for professional services to physicians and nurses and (2) that paid to the hospital for hospitalization. Both of these costs are at times a distinct burden to patients, especially when both must be paid at approximately the same time. As most hospitals are insufficiently endowed and have difficulty in operating efficiently, especially in recent years, most physicians have felt that in an illness that requires hospitalization the hospital should be paid before the physician so that the hospital may be maintained. Whether the physician is so philanthropically inclined as to consider the hospital first or not, in practice this is the case, because almost invariably the physician's care of the patient is not terminated when the latter is discharged from the hospital. Thus, the hospital bill is submitted before the physician's fee and is more likely to be paid. The result has been that almost invariably individuals who have limited funds to care for a particular illness have paid the hospital and the attending physician has been left "holding the bag."

Frequently a patient feels justified in making the physician wait for his remuneration, because the services he has rendered appear less material and are more personal than the room which was occupied, the food that was eaten, and the medicines that were administered. Few, if any, physicians have not at some time had the experience that hospitalization expense considerably delayed or even prevented payment of their fees.

*In New Orleans group hospitalization has proved beneficial to both the medical and nursing professions for with hospitalization costs provided for patients are able to afford special nursing and to pay doctors' fees*

By means of the group hospitalization plan, which permits the budgeting of hospitalization, the double financial burden occurring at the time of an illness is obviated and the patient's entire resources are available for the payment of professional services. For approximately two and a half years a group hospitalization plan has been in effect in New Orleans and whereas in the beginning the medical profession was skeptical of its merits, with few exceptions the entire profession is whole-heartedly behind this movement now.

This change in feeling toward the plan is due to two things: (1) it is easier to obtain hospitalization because patients enrolled in the plan do not object to being admitted, whereas previously many objected to necessary hospitalization; (2) the hospital expenses being paid by the hospitalization group, the patient has sufficient funds to pay his professional fees. The patient is able to secure better care while in the hospital under the group hospitalization plan, because it is possible for him to have the services of private or special nurses, whereas otherwise the hospital expense would preclude this additional expenditure. The importance of this is obvious, as it has a double effect (1) the care of the patient is better and therefore his comfort is greater and frequently his convalescence more rapid, and (2) more nurses are given employment, which is of great economic importance.

The New Orleans plan provides for a maximum of twenty-one days' hospitalization, the use of the operating room and the pathologic laboratory without additional charge, and a discount of 33 1/3 per cent of all hospital services not designated, such as x-ray and basal metabolism laboratory. A 33 1/3 per cent reduction on hospitalization costs for dependents is provided. The plan which operates in New Orleans in no way interferes with the physician's relation to the patient, and as the plan is operated entirely by the hospital there is no chance of commercialism and exploitation of hospital facilities.

# What to Do Till the Fire Department Comes

By V. L. DOUTHIT
Fire Protection Engineer, Chicago

IS YOUR hospital provided with adequate first aid fire extinguishing equipment? Or if a fire occurred would you merely have to pace the floor and hope that the department would hurry?

It is unfortunate indeed that many fires start during hours when no one is about, or in places not frequently seen, but what is much more unfortunate — and certainly far less excusable — is that so many fires are discovered almost as soon as they begin and even then are not extinguished because nothing is available for successfully combating them. Most fires if attacked within the first five minutes with a dependable fire extinguisher can be put out with but little damage. The extinguisher, however, must be readily available and prepared for instantaneous use, because in halting a young fire speed is imperative. Give those greedy flames a few minutes to grow and no extinguisher will be effective.

Since fire is the combination of oxygen with any substance heated to a temperature above the burning point, there are two primary ways of extinguishing it — by excluding the oxygen, accomplished by smothering the fire, or by cooling the burning substance below its burning point, usually accomplished by application of water. Water, because it cools burning substances to below their burning points and has a smothering effect through steam generated when it meets heated and burning substances, is an excellent fire extinguishing medium but it is not always the best. In a fire in flammable liquid the addition of water merely spreads the flames, consequently a chemical solution which, in addition to the water that such preparations usually contain, gives off a fire smothering gas such as carbon dioxide, would be effective in putting out a fire.

### *Water Pails — the Oldest Extinguisher*

The oldest, cheapest, and one of the best forms of first aid fire extinguishing equipment is the water pail. Since it is difficult to throw water from a pail any great distance accurately, water pails should not form the only source of such equipment but should be augmented by chemical extinguishers. Water pails should be of 12-quart capacity, should have round bottoms so that they are not usable for other purposes, should be painted red and stenciled "For Fire Only." They should be filled with clean water and inspected regularly. It is frequently advisable to have a large cask of water available for fire use. Such a cask with three fire pails usually constitutes a unit of such equipment. When necessary the water should be treated with calcium chloride to prevent freezing.

Another method of providing water readily for fire use is the installation of fire hose inside the building. Since this type of fire extinguishing equipment requires a little more time to operate than a chemical extinguisher or water pail, it serves well as an intermediary protection between the initial stage and the stage which requires large volumes of water, such as are provided by the fire department pumper. Fire hose should be mounted on approved fire hose racks, should be maintained in excellent condition, attached to

*Firemen fight blaze at the nurses' home of Harrisburg Hospital, Harrisburg, Pa. Damage to the home was estimated at between $4,000 and $5,000.*

standpipe and with nozzles in position and should be used, of course, for no other purpose than the extinguishing of fire. Frequent and careful inspection is important in keeping this equipment in perfect operating condition. Standpipes should be sufficiently large to provide adequate pressure at all points and enough hose lengths should be provided throughout the building that all parts are within reach of a hose stream.

*Advantages of Automatic Sprinklers*

Automatic sprinklers are excellent for providing water for putting out fire. In addition to the fact that sprinklers spread water through any part of a building where fire may occur, such systems have the additional advantage of operating automatically without the aid of human hands.

Chemical fire extinguishers are so widely used that the 2½-gallon brass jacketed or red painted extinguisher is a fairly familiar object, and constitutes the most effective quencher of incipient fires. This statement of their effectiveness is borne out by the fact that over 80 per cent of the fires to which fire departments are called are extinguished by chemical fire extinguishers. If they put out so many of the fires to which the fire department is called, would it not be wise and efficient to equip a hospital with a goodly number of them for use even before the fire department arrives?

Chemical extinguishers are made in a variety of kinds and sizes, each of which has a use for which it was specifically designed. For fires in oils, there are, for example, the foam, carbon dioxide and carbon tetrachloride types; for fires in electrical equipment the carbon tetrachloride type, the extinguishing agent of which is a nonconductor of electricity, and the soda and acid type for general use.

All extinguishers should be inspected frequently and kept in excellent working order for their effectiveness lies in the speed with which they may be put into action. Usually all that is required is simply to invert the container or to operate a pump handle. Most chemical extinguishers are required to be discharged and refilled at least once each year, for the active ingredients degenerate in time. The instructions for refilling accompanying chemical extinguishers should be followed precisely.

It is apparent that there is a wide variety of fire extinguishers, and the best type for any hospital should be determined by an analysis of its particular conditions. In general for hospital use an adequate number of 2½-gallon soda acid extinguishers is the most effective. Care should be exercised in purchasing to determine that the extinguisher is properly made and of good quality, the best assurance of this being that it bear the label of approval of Underwriters' Laboratories. Suggestions regarding the kind of fire extinguishing equipment best suited to the needs of a hospital may be had without cost by consulting the local fire insurance rating and underwriting organization. Fulfilling their requirements will have the further benefit of reducing the cost of insurance.

Finally, after first aid fire extinguishing equipment has been installed, hospitals should insist that all employees know where all of the equipment is and how to operate it. One hospital with which we are familiar has developed an ingenious, effective and economical method of training its nurses in the use of chemical fire extinguishers. On the date each year when the extinguishers are discharged and refilled a bonfire is lighted in the hospital yard and each individual is given an extinguisher to practice with. This occasion is, for most of the nurses, the first opportunity to operate an extinguisher.

## Ready-Made *Versus* Hospital-Made Solutions

In the past any intravenous solution made in our hospital was administered with more or less fear. We had come to expect a reaction, due not to faulty technique in preparing the solution but more frequently to some remote cause over which we had no control.

We always used double distilled water prepared in the institution. There was never any question of the sterility of the solutions as all of them were carefully autoclaved and handled in the approved manner. Dextrose solutions were carefully watched for evidence of caramelization. But in spite of all precautions reactions were more frequent than should have been the case. We were all concerned.

These reactions were, no doubt, due in a measure to the chemical condition of the water used in the solution. Sometimes it became alkaline from the container. At best, while we had a strictly sterile solution, we did not and could not have a chemically pure product to administer to the patient.

Somewhat over a year ago, after careful thought, we decided to use ready-made solutions that had been tested, as all intravenous preparations should be, and found to be reaction free. Now we have at all times solutions of all important preparations at hand ready for use. There is no delay; no doubt as to their reliability, and no fear that the patient will suffer unpleasant reactions as soon as the solution begins to be absorbed. These prepared solutions have been accepted by the medical staff and the nurses with enthusiasm. After a year's trial I do not think it would be possible for us to go back to hospital-made intravenous solutions and to their accompanying uncertainty. —*Edward J. Cadman, pharmacist, Youngstown Hospital, Youngstown, Ohio.*

# Always Costly, Always Dreaded—Quarantine*

By JOSEPH C. DOANE, M.D.

*"Quarantine!" The administrator visions figures in red ink on the wrong side of the ledger. He wonders if the admitting room procedures are not strict enough and decides to investigate, and then he checks his physical plant, daily, twice a day*

"THE children's ward is under quarantine." This statement, made to the administrator by the chief resident physician, possesses an ominous ring. It signifies that for a period of uncertain length a ward is to be useless to the community; it portends a threatened danger to every child in this division, and it means added expense for the salaries of nurses and for the purchase of laundry supplies, disinfectants and other commodities necessary in the conduct of work in an isolated area.

Quarantine urgently suggests the need for the provision of other quarters for the care of emergency cases which are sure to need prompt institutional aid. An immediate investigation as to the source of the infection and a serious effort to fix the blame for any carelessness which might have resulted in the admission of the unfortunate patient, should be made, together with a careful study of the number of susceptibles in the ward exposed to contagion.

The practical and efficient handling of contagious problems in the general hospital presents a major difficulty. No hospital is exempt from the presence of contagious disease, particularly during the spring and winter months, but institutions in which children are accepted are most likely to meet the difficulty.

### *Contagious Diseases Costly to Hospital*

The dimensions of the problem are fortunately narrowing as our knowledge of the etiology of this type of disease widens. The splendid discoveries of recent investigators as to the rôle that the streptococcus plays in the production of scarlet fever, erysipelas and similar conditions have simplified both prevention and cure. There are a number of troublesome diseases, not as death dealing as diphtheria and scarlet fever, but equally, if not more, contagious. These annually cost the hospitals in the field great sums of money through quarantines, consequent loss of service and lowering of efficiency in emergency wards.

All persons possess an acquired or a natural resistance to some type of disease. In the protection of the community, the administrator or his medical representative endeavors first of all to learn, when a quarantine is declared, which of the exposed patients are likely to develop the condition and which may be discharged without endangering others. Fortunate, indeed, is the circumstance in which a majority of patients in the children's ward have at some time been ill with the disease causing the quarantine. In diseases in which effective preventive measures have been developed, the remaining children may be promptly rendered immune to the contagion to which they have been exposed. So that while these terms may appear to possess but little of practical application to the administrator's work, they in fact represent more or less intangible factors which may determine that a quarantine will be short in duration or that it will disable a whole hospital division throughout most of the winter months.

The administrator should not wash his hands of the whole matter of quarantines and allow the administrative procedures necessary to rest on the desk of a chief resident physician with but a few months' experience. The hospital cannot afford to display lack of intelligence or questionable honesty in its dealings with local health authorities.

Here and there one observes a tendency to be evasive, to refuse to make an almost self-evident diagnosis because of the difficulty and expense of

*Practical Administrative Problems Series.

a quarantine. When such an attitude is assumed, the superintendent is likely to be firmly handled by the health officer, to have the letter of the law absolutely enforced and quarantines strictly maintained to their last day and hour. So it is wise to hew strictly to the line in observing health regulations.

In the past it was felt necessary to isolate those exposed to transmissible disease for a period of forty days, hence the term "quarantine." Fortunately today all contagious diseases are not required to be isolated for this period. The length of a quarantine depends upon the disease. Every city and political subdivision possesses its own quarantine laws. Every hospital should have plainly written into its rules the measures to be taken when a contagious disease arises.

The differentiation between measures necessary for handling the less transmissible diseases and those required in the treatment of the so-called contagious groups is of the highest importance. Many hospitals speak in their regulations of strict or absolute and modified isolation practices. The former type of isolation is carried out in the handling of the contagious group. The latter is employed in the instance of such diseases as typhoid fever, erysipelas, streptococcic sore throat, pneumonia, cerebro-spinal fever and encephalitis.

### *One Break in Technique and —*

It is an old saying that compares the strength of a chain to that of its weakest link, and yet this statement may be truthfully applied to the efficiency of quarantine or isolation practices. Little does it profit a hospital to engage an ample force of nurses, to provide proper laundry, food and garbage facilities if a staff member refuses or neglects to gown or to wash his hands during his contact with a suspected or real case of contagion. One break of technique and the entire quarantine structure falls.

The opinion of physicians and hospital administrators has been greatly altered during the past decade in respect to the treatment of contagious disease in conjunction with the work of a general hospital. There is almost no question as to the duty of the community hospital to treat all conditions, excepting perhaps mental diseases, arising within the district it serves. Many hospitals possess splendid contagious wards so efficiently conducted that crossed infection is unknown in the general service. In communities where no contagious hospital exists, the general hospital should seriously consider its obligation to provide for the treatment of these diseases in the proper surroundings.

As our knowledge increases relative to the cause of "contagion" and "infection," the former group will diminish and the latter increase in number. After all, a contagious disease, often one of unknown cause, is distinguished from an infectious condition largely by its ease of transmission. When the bacterial cause of a contagion is discovered, it in reality loses its identity as such and becomes an infection. Hence the belief that the transmission of these diseases by air borne methods is a rarity and that contact with infected hands, gowns and ward articles is the usual method of transference.

### *Length of Quarantine Varies*

The difficulty these diseases present insofar as the length of their quarantine is concerned largely hinges upon what is known as their period of incubation and upon their ease of transference. Many of them possess a period of incubation, which represents the time elapsing between the exposure of a patient to a contagion and the development of symptoms, which varies from one to two weeks. Thus a highly contagious disease with a long period of incubation would offer the greatest practical institutional difficulties.

Chicken pox is a disease readily transmitted from the sick to the well and it has a long period of incubation. Hence this disease may produce long quarantines with resulting loss in hospital money and service. On the other hand, a disease with a short period of incubation and a low degree of contagiousness is likely to require a more brief period of observation and to give rise to fewer secondary cases. In addition, a condition which long remains transmissible following the acme or the height of the disease is capable of prolonging quarantines indefinitely. Scarlet fever no longer is thought to be highly contagious during its period of desquamation or skin shedding and yet discharging ears may continue a quarantine for this disease over many weeks.

Diphtheria troubles the hospital administrator but little. Approximately four decades ago Von Behring developed a prophylactic serum for this condition, perhaps the most valuable specific serotherapeutical agent that has been given to the medical profession. In most enlightened communities, active and effective campaigns leading to the protection of children against diphtheria have been carried on. This fight of protecting children of from six months to six years of age has been widely and strenuously waged so that in the children's ward of the hospital the majority of patients are likely to be immune to an infection by the diphtheria bacillus.

It is a matter of great interest that the mother imparts to her newborn child an immunity against

contagious disease which may persist for a number of months following birth, yet in the instance of diphtheria this resistance to infection rarely persists longer than the first six months of life. About 95 per cent of all children of preschool age when tested show a susceptibility to diphtheria, but the use of modern immunization methods against diphtheria brings about an almost 100 per cent protection. The widespread adoption of this practice — the injection of two doses of one cubic centimeter of toxoid in children of preschool age — accounts for the relative emptiness of diphtheria wards.

### *Taking Steps Against Diphtheria*

In some institutions it is required that the throats of all children admitted be cultured. It is questionable whether this is a necessary or even an effective method of preventing the admission of diphtheretic children. In tonsil cases particularly, these patients have been admitted and discharged before the bacteriologic reports are forthcoming. A clinical examination is usually sufficient to determine the presence or absence of diphtheretic infection. It is interesting that, because the use of protective measures against diphtheria is so widespread, the hospital accident ward physician is cautious in the administration of tetanus or other protein serum because of the danger of violent reactions following as a result of sensitivity due to previous immunization.

Scarlet fever is one of the bad boys of this group, and yet much has been done to overcome its dangers to hospital children. From time to time, however, following the incision of tissues surgically, scarlet fever develops within a remarkably short period following operation. The protection of patients against this infection and the treatment of the condition once it arises are rapidly being improved.

The period of isolation for scarlet fever in many cases is thirty-five days or until desquamation and all nasal and throat discharges have ceased. It should be considered as something of a reproach to a hospital when secondary cases develop following an exposure of scarlet fever. In the adult wards this rarely happens. In the children's ward it occurs not often but all too frequently. Smallpox has almost disappeared as a public health problem and yet from time to time, particularly in large general hospitals, physicians are caught unawares and treat this condition for some other infection until the rash appears.

Measles is a disease highly contagious and one that possesses marked inherent dangers to the lives of children. Few children die of measles, but the pneumonia which so often complicates or follows it is as destructive as any other of the group under discussion. Since almost all adults during their tender years have suffered with measles, the mother is likely to confer a definite immunity to her newborn. Measles in the first year of life is rather unusual.

The use of whole blood injected into the children in an exposed ward has frequently proved effective in limiting secondary cases. It is, of course, a matter of common knowledge that the germ that produces this disease is still undiscovered. Four decades ago the parasitic cause of measles was hazarded but still remains to be proved. Here a period of incubation of from ten to twelve days and a rather easily transmitted disease usually determine a minimum hospital quarantine of at least two weeks. It can easily be seen how carelessness in handling such a situation might prolong this isolation period indefinitely.

During the past half-year rubella, or German measles, has swept through many urban areas in this country. This is a condition almost wholly harmless from the standpoint of producing disability or death yet easily transmitted, particularly by ward articles. The rash continues for three or four days, but the period of incubation, is long, varying from five to twenty-one days. Hospital wards at the least are usually quarantined from sixteen to twenty days.

Chickenpox or varicella is also a troublesome disease. Here is a long period of incubation, ranging from fourteen to twenty-one days, a condition considered one of the most contagious and yet a disease rarely endangering life. An interesting fact in regard to chickenpox is the possibility of its being confused with variola or smallpox.

### *Precautions in the Pediatric Ward*

Patients should not be admitted to the wards, particularly the pediatric department, without having passed through a receiving ward where a careful physical examination is likely to reveal the presence of transmissible diseases. The admission of patients from the street to the ward without an intermediate removal of clothes, a careful inspection of the entire skin surface and a bath on admission courts disaster. Strict separate nursing for each child in the pediatric department is a modern and necessary measure.

Interns and nurses should have an opportunity to observe contagious diseases and to learn modern methods of handling and of control. It is regrettable that in the average general hospital the intern staff has no opportunity of studying contagious or even ordinary dermatologic conditions. Once a quarantine is established, the twice daily inspection of the bodies and the throats of

patients for rashes and exudates and the third-hour recording of temperatures are highly necessary. Most interns and nurses have yet to observe Koplik spots or diphtheretic throats before they are ready to leave the institution. A measly rash, so typical to the initiated, often passes unrecognized by the intern in the general hospital; desquamating toes and fingers are likely to be considered of little importance.

The removal of a contagious patient to the isolation department, unfortunately frequently placed in a dark or poorly ventilated basement, is a confession of weakness, yet the lack of development of a refined contagious technique in the average intern and nursing personnel of a general hospital makes this necessary. Visitors are restricted from a quarantined area.

The nonmedical administrator should daily check on food delivery and the removal of garbage, the handling of laundry, the efficiency of sterilization, the absolute requirement that nothing goes in and nothing goes out of a quarantined area, and in general provide the physical means of enforcing absolute isolation. Patients unduly detained in the hospital because of a quarantine should not be required to pay for added board any more than the passengers on a storm-bound Pullman should be forced thus to add unduly to the expense of their trip.

Along with the forty-day quarantine went the old-fashioned methods of sulphur burning and formaldehyde spreading. The entrance of sunlight and fresh air, the sterilizing of mattresses and bed linen and the creation of an atmosphere of cleanliness are usually sufficient to safeguard others who later enter an area formerly isolated.

# Swedish Research Bureau Proves Valuable

By WILLIAM A. RILEY, A.I.A.
Stevens, Curtin and Mason, Architects, Boston

IN THE spring of 1935, the city of Stockholm, Sweden, established a research bureau in connection with the building of a 1,500-bed general hospital. This new central hospital will cost approximately $5,000,000 and is to be built in Sodermalm, the district that forms the southern area of Stockholm.

Hjalmar Cederstrom, architect and engineer, Stockholm, was appointed by the town council as director of this bureau. A special building was placed at his disposal where he could carry out his new ideas and methods on hospital research.

The purpose of this research bureau was to study thoroughly the many departments of a large hospital by means of cooperation between doctors, nurses, architects, and engineers, so that when the plans are completed there will be no need for alterations during construction.

This office is unique and one of the most interesting bureaus of its kind in Europe. Mr. Cederstrom's years of study of hospital problems, his planned development of hospital systems for the city and his system of cooperation can be carried out under ideal conditions.

The research work is divided into administrative, medical and technical departments. In each of these, experts have been assigned by the city to advise and assist the architects and engineers on the latest development of hospital planning and technique.

Many studies are made of the different phases of hospital work. Considerable attention is paid to the developments made in other countries in order to select the most efficient and economical methods of hospitalization adaptable to Sweden. An international exchange of ideas is effected by engaging foreign hospital architects to work in the research office rather than through correspondence. So that the modern American hospital systems might be understood, I had been commissioned by the city of Stockholm to spend several months in the research office, explaining to the staff of experts the latest developments in hospital technique here.

Another important work of this office is the experimental department. This functions much like that of large industries, where experimental and research work forms an important part of actual production. One entire floor is devoted to the study of private rooms, wards, utility rooms, solariums, and these units are all built to exact size, completely equipped. Besides this, there is the extensive study of all types of electrical and plumbing equipment, hardware, floor material, color treatment, window and door sizes. One can appreciate the need for this study when it is realized that equipment and rooms in a modern large hospital may be repeated several hundred times.

An interesting aspect of this research bureau is the establishing of a central record office for all Swedish hospitals. The large amount of up-to-date hospital material collected from all over the world is to form a nucleus for a permanent hospital bureau in Stockholm. The advantages of this would be to prevent needless repetition of research work.

When this investigation has been completed the final proposals will be submitted to the city council for approval. Then the working drawings can be started and followed without delay by the actual construction of the hospital.

Thus the deliberation in the formulation of a definite program and the necessary research work, even though requiring much time, will in the end prove worth while.

This procedure is different from that used in the United States and it might serve as a model. Conscientious hospital consultants and architects who understand the nature of hospital work should appreciate the value of a hospital research bureau.

# PLANT OPERATION • • • •

Conducted by John R. Mannix and R. C. Buerki, M.D.

# Safeguarding the Operating Room Against Explosions

By Victor B. Phillips

University Hospitals, Cleveland

DURING the past several years the anesthesia explosion hazard has come to be recognized as a matter of first importance in operating room design and procedure. Numerous articles have appeared on the subject. The National Board of Fire Underwriters has published "Recommended Safeguards" (1929). In 1930, a committee of the American Medical Association published a report entitled, "The Hazard of Explosion of Anesthetics." There have been many explosions, although statistics as to their frequency and seriousness are not available.

The danger is real and great. It must be so recognized by everyone who is connected with surgery or has anything to do with the handling of anesthetics. Although the anesthesia explosion hazard is perhaps not great in comparison with the other hazards of surgery, it is for the most part a preventable hazard, so that no anesthesia explosion or fire is to be condoned.

Proper safeguarding against the anesthesia explosion hazard calls for a full understanding of the subject and of the principles involved, and for ceaseless vigilance on the part of surgical personnel. Nothing in the way of construction or equipment will eliminate the necessity for such knowledge and such vigilance. This knowledge must embrace the fundamentals because it is unlikely that any code of procedure can be written to take into account every conceivable dangerous combination of factors.

Although the repair of certain of the surgical equipment which contributes to the explosion hazard may be vested in others, it is important that everyone connected with surgery be constantly on the lookout for worn or defective equipment (especially electrical equipment) and immediately call attention to any. Although there may be regular routine inspections by the maintenance department or others, such inspections can never be considered all-sufficient.

## Elements of Combustion

An explosion results from the combination of (1) an inflammable gas, vapor or other substance; (2) oxygen (either pure or in the air), or a gas or other substance which provides oxygen (such as nitrous oxide); and (3) a source of ignition. These factors suggest the fundamentals in all precautionary procedure, namely: (a) handling and using inflammable anesthetics in minimum quantities; (b) minimizing escape into the room; (c) eliminating so far as practicable all possible sources of ignition in anesthesia and operating rooms when explosive anesthetics are being used, and above all within the anesthesia equipment itself.

## Inflammability of Anesthetics

All of the commoner anesthetics used for general anesthesia in vapor or gaseous form are highly inflammable: ether, ethylene, ethyl chloride and cyclopropane.

Oxygen, nitrous oxide and air are supporters of combustion. The above anesthetics when mixed with the supporters of combustion are explosive through a wide range of concentrations (see table) and inflammable in greater concentrations.

In general, it may be said that concentrations as low as 2-4 per cent (authorities differ as to exact low limits) are explosive for the above mentioned anesthetics.

Ethylene is usually administered in mixtures of 80 per cent of ethylene to 20 per cent of oxygen (and lesser concentrations for obstetric analgesia). This 80 per cent to 20 per cent mixture is approximately at the upper limit of the explosive range. However, at the completion of anesthesia, the ratio of ethylene to oxygen or to oxygen and air, or to oxygen and carbon dioxide, is reduced down through the entire and wide explosive range. Ethylene diffuses in air readily, having about the same specific gravity as air and consequently there is comparatively little danger of igniting it at more than 10 or 12 inches from the mask or machine, although of course a high velocity stream of the explo-

LIMITS OF INFLAMMABILITY OF ANESTHETIC AND OTHER GASES

| Substance | Formula | Molecular Weight | Atmosphere | Inflammable Limits, Per Cent by Volume: Lower | Upper |
|---|---|---|---|---|---|
| *Ether | $(C_2H_5)_2O$ | 74.08 | Air | 1.85 | 25.9 |
| *Ethylene | $C_2H_4$ | 28.03 | Air | 3.05 | 28.6 |
| *Ethylene | $C_2H_4$ | 28.03 | Oxygen | 3.10 | 79.9 |
| *Propylene | $C_3H_6$ | 42.05 | Air | 2.10 | 9.7 |
| *Propylene | $C_3H_6$ | 42.05 | Oxygen | 2.10 | 52.8 |
| *Nitrous oxide | $N_2O$ | 44.00 | | Noninflammable | |
| *Chloroform | $CHCl_3$ | 119.38 | | Noninflammable | |
| *Methane | $CH_4$ | 16.03 | Air | 5.00 | 15.0 |
| *Hydrogen | $H_2$ | 1.008 | Air | 4.00 | 74.0 |
| *Carbon monoxide | CO | 28.00 | Air | 12.50 | 74.0 |
| *Pentane | $C_5H_{12}$ | 72.10 | Air | 1.40 | 7.5 |
| **Ethyl chloride | | | Air | 4.3 | 14.0 |
| **Gasoline | | | Air | 1.4 | 6.0 |
| ***Cyclopropane | | | Air | 3.0 | 8.5 |
| ***Cyclopropane | | | Oxygen | 2.5 | 50.00 |

*United States Bureau of Mines.
**From The MODERN HOSPITAL, 43:85 (July) 1934.
***See Paper by Buchman & Wardwell—Ohio Chemical Co.

The author wishes to acknowledge the constructive suggestions and opinions of the following: Mrs. Gertrude Fife, chief anesthetist, Lakeside Hospital, Cleveland; Anne Pennland, chief anesthetist, Presbyterian Hospital, New York City; Dr. Harold R. Griffith, Homeopathic Hospital, Montreal; Dr. H. B. Williams, Columbia University; Dr. Wesley Bourne, Montreal; Dr. Richard V. Foregger, New York City; and additionally published articles by: Dr. Elliot Cutler and Prof. P. L. Hoover (Peter Bent Brigham Hospital of Boston and Rutgers University, respectively); Prof. Yandell Henderson, Yale University; G. W. Jones and R. E. Kennedy, United States Bureau of Mines, and numerous other valuable articles on the subject of anesthesia and the attendant explosion hazard.

sive mixture may quite conceivably be projected several feet before dilution below the explosive concentration.

Ether is normally administered from a gas machine in much lower concentrations than ethylene and practically all of these concentrations are within the explosive range. Ether given by the drop method and the resultant mixtures with air are highly inflammable rather than violently explosive. Ether vapor is two and one-half times as heavy as air, so that it does not diffuse readily. This means that the casual mixture with air, in the drop ether method, may be less complete and intimate.

For the same reason ether is less likely to become diluted to concentrations below the inflammable or explosive range. Instead, it tends to drop to and collect along the floor, or to collect in pockets which may be formed by operating table coverings and screens. Streams of ether vapor from table down to and along the floor may be easily ignited and will usually flare rather than explode. Such flare is likely to travel back along the ether stream to the patient and anesthesia machine and may result in an explosion.

Cyclopropane[1] (also acetylene and similar gases) has characteristics which are in general more similar to ethylene than to ether.

Chloroform (except when mixed with alcohol) and nitrous oxide are the only commonly and generally used anesthetics which are noninflammable and which therefore do not form explosive mixtures.

Carbon dioxide, if in high enough concentrations, tends to smother combustion, but in the low concentrations usually occurring within the anesthesia equipment and patient's respiratory system, it will not noticeably reduce explosiveness of the anesthetic mixture. Such value as it may have in anesthesia is physiological. Also it may be used to advantage for flushing out equipment after use with inflammable anesthetics.

## Sources of Ignition

Following is a general grouping of possible sources of ignition:

1. Any electric spark or arc either from static electricity or from electric circuits. Such electric sparks or arcs even though minute are particularly effective in igniting an explosive mixture because of the intensely high temperature and possibly also because of some detonating effect.

2. Open flames.

3. All objects heated to or even somewhat below visible incandescence, such as cauteries, lighted cigarettes and the like. There is no unanimity of opinion as to the lowest temperatures which will ignite inflammable or explosive anesthesia mixtures. However, it is probably true that any object having a temperature of 400° F. or more is potentially dangerous.

4. Spontaneous combustion. This is more apt to occur under rather considerable pressures. For example, oil or grease in the valves or lines containing oxygen under pressure will usually ignite spontaneously. There have been explosions resulting from the admitting of ethylene by mistake into an oxygen cylinder under rather high pressure, or vice versa.

Of the above sources of ignition, electric sparks from static and from the various electric circuits call for further discussion.

## Dangers of Static

Static electricity is the most insidious and the most dangerous cause of explosions, both inside the anesthesia machine and throughout the operating room. Static is created by friction, chiefly between nonconducting materials, including gases. When so created or deposited on a non-conducting surface, these static electric charges may develop potentials of several thousand volts. These high voltages or potentials are caused by what may be a very small charge which remains closely localized *in situ*, whereas on a conducting surface a similar charge will spread or leak off so that the voltage is dissipated.

In general, the presence of moisture increases electrical conductivity and consequently results in the spreading or leaking off of static charges.[1] Static is most likely to occur in heated buildings in winter for the reason that the outside cold air cannot hold much moisture. When this cold air is heated the actual moisture content of the air is not reduced, but the air becomes capable of absorbing and holding a great deal more moisture. In other words, the relative humidity, which is the ratio of actual moisture in the air to the maximum which it will hold, is greatly reduced.

The presence of adequate relative humidity (60 per cent for most materials) in the surrounding air deposits a moisture film on the otherwise nonconducting surfaces and thus serves to prevent or minimize the accumulation of static for nearly all materials commonly occurring in operating and anesthesia rooms and corridors. It should be noted however that friction between certain materials results in static which may be retained by these materials at very high relative humidities —85 per cent or more. Hard rubber and wool are such materials. Wool is therefore a dangerous source of static sparks even with relative humidities which will cause static charges on most other materials to leak off readily.

For purposes of safe procedure, it must be assumed that virtually all objects, materials, and gases found in and about operating and anesthesia rooms are potentially hazardous as sources of static sparks. For example, in a rather dry atmosphere the slightest brush of clothing over the surface of a rubber breathing bag will leave an appreciable static charge both on the bag and on the clothing. Dry anesthetic gas or oxygen flowing through a rubber breathing tube will produce static charges in the rubber and in the gas. Persons walking over rubber floors either with rubber or leather shoes, operating tables or other rolling equipment with rubber tires, will all collect static charges unless there is adequate atmospheric humidity to cause the dissipation of these charges. The possibilities of static are too numerous to attempt listing.

## Moisture Is a Safeguard

Moisture in the air or otherwise applied to nonconducting surfaces, as already pointed out, is a safeguard because it provides a conducting path for the spreading or leaking away of the static. By the same token, the use of metallic conductors in intimate and closely adjacent contact with nonconducting surfaces will likewise provide means of dissipating static charges which otherwise would tend to accumulate, closely localized and at high potentials on such surfaces. If these metallic conductors are applied properly on all nonconducting surfaces which are likely to produce or hold static, their effectiveness as a safeguard might approach that of moisture.

The difficult problem however is actually and practically to achieve such a result. If even a small area of breathing bag or tube is not in contact with a wire or metal mesh through which to discharge to frame or ground; if a blanket has been brought out of a dry storage room and by slight friction in transit picks up a static charge for which no dissipating conductor is provided, then there may result even greater differences in static potential between objects or between objects and persons than would have existed without such a conductor, especially if that conductor be grounded.

Grounding is an effective safeguard only if thoroughly and consistently applied. This is difficult of accomplishment and furthermore, as dis-

[1]Cyclopropane — density 1.46 x air — boiling point 34.4° C. Usually administered 15 per cent Cyclopropane—85 per cent $O_2$.

[1]Pure water has a very low electrical conductivity, but the presence of even the slightest quantities of foreign matter, including the minerals almost invariably present, greatly increases the conductivity. The conductivity of the usual distilled water is much higher than absolutely pure water. Carbon dioxide exhaled by the patient into the tubes and breathing bag of the anesthesia machine will materially increase the conductivity of the moisture inside the machine.

cussed in detail later on, involves other hazards which at least partially offset such protection against static as this method may afford.

## Electric Circuits

All electric circuits and electrical equipment are potentially hazardous in the presence of inflammable anesthetics. Such circuits and equipment in modern operating rooms are too numerous to list completely. The following are the more usual:

1. Lights and light fixtures, both installed and portable.
2. Receptacles and attachment plugs.
3. All switches.
4. All rheostats and adjustable transformers.
5. Cords to portable and semiportable equipment, in fact all cords or wires which are exposed.
6. Electrically heated sterilizers (such as an oil type).
7. Electric cauteries.
8. Head lights and special examination lights (usually low voltage).
9. Diathermy and fulguration units, high frequency knives and similar equipment.
10. X-ray and fluoroscopic equipment.
11. Motors of suction units and bone saws.
12. Electric cardiograph.
13. Telephone instruments, buzzers, bells and especially telephone magneto ringers.

The problem with all of this equipment is simply to install such types, to maintain and to exercise such caution in using, that none of these sources of ignition can contact the inflammable anesthetic or the explosive anesthesia mixture.

There are various makes of vaporproof switches, plugs and receptacles, such that sparks created by making and breaking contacts are completely shielded and protected against contact with the explosive gases and vapors.

Light bulbs can be so enclosed and guarded that breakage will not expose the hot or sparking filament.

Cords and terminals of portable equipment or which are not mechanically protected by conduit or armor or otherwise, are a continual source of danger because of wear and breakage. Only ceaseless care and good maintenance will control this.

Sliding contacts on rheostats and adjustable transformers are likely to spark and should be entirely enclosed.

Electric cauteries are triply hazardous. First, the heated element is often hot enough to ignite the anesthetic mixtures. Secondly, the rheostat or transformer for adjustment of temperature is likely to spark. Thirdly, the cord and terminals through frequent usage are likely to break or become detached causing an arc or sparking.

It is generally recommended that the cautery, as also diathermy and fulguration units, x-ray and fluoroscope, and all similar spark producing equipment, not be used in the presence of inflammable anesthetics. This is not always practicable. It is submitted here that if the use of an inflammable anesthetic in the presence of such dangerous source of ignition cannot be avoided, then with certain precautions and limitations the operation can be made reasonably safe.

## Safeguarding the Cautery

First, however, it must be emphatically stated that under no circumstances can any cautery or other spark producing equipment be used around the head of the patient or in the pleural cavity, when the patient has been anesthetized with any inflammable anesthetic. To do so is criminal negligence, a fact amply proved by many fatal explosions and burns caused in this way. This, at present, leaves only nitrous oxide, chloroform, local or spinal anesthesia for these cases.

Ethylene, as already pointed out, diffuses readily to concentrations below the explosive range. With a carefully erected screen between the head of the patient and point of application of the cautery or spark producing equipment, such as diathermy or fulguration unit, it would appear that the chance of an explosive concentration of the anesthetic reaching this source of ignition is not great, particularly if the room is well ventilated and the ventilation properly directed (from the head of the patient away from the operating table). However, it is doubtless much safer under such circumstances to avoid the use of ethylene or any other inflammable gas which diffuses readily.

Ether does not readily diffuse, but on the other hand is so much heavier than air that with the protection of a proper and close fitting screen it will tend to go down to the floor and not along the body of the patient to the point where the cautery or other source of ignition may be in use. In this case it is probably wise to avoid any considerable drafts which might possibly carry the ether to the ignition source. Except for the contingency of such a draft, ventilation is desirable with ether as well as with ethylene or any similar anesthetic, because such ventilation serves to dilute and carry away the anesthetic mixture.

When it is necessary to use a suction unit or bone saw or other motor driven equipment, it is important that the motor be of a special enclosed type with bearings of proper design and nonsparking materials.

Telephone instruments, buzzers, bells, ringing magnetos and the like, should simply not be installed in operating or anesthesia rooms.

Uninsulated terminals or other exposed conductors carrying 110-120 volts (usual house current) are an unnecessary hazard and should be eliminated. Such exposed terminals often occur in cautery units.

In addition to the above, there is a serious hazard which has rarely if ever been covered in the literature relating to the operating room explosion hazard. It is the deterioration or improper wiring of concealed electric wiring in fixtures and equipment. The danger exists more particularly in portable equipment and especially in examination lights or other electrical equipment which is frequently washed or sterilized. Due to wear and tear or to water or to the heat of sterilization or to all of these causes, concealed insulation may break down and concealed connections may come loose or wires may even break from frequent flexing. Thus two things may happen. Bad sparking or arcing may occur, or the metal shell of the light may become electrically "live."

With the three wire grounded neutral system so commonly used in light and convenience outlet circuits, the shell of the portable floor lamp or examination light or other piece of equipment may have a potential of 110 volts with reference to any grounded object. If such metal shell comes in contact with such grounded object (and it is frequent practice to have all operating room equipment grounded) there results a short circuit flash or arc. If any person touches a grounded piece of equipment and at the same time touches a "live" shell or frame a bad shock is the result. Needless to say this is a dangerous source of ignition in the presence of inflammable anesthetics and furthermore may be quite dangerous from the standpoint of shock.

## When Insulation Fails

An instance occurred with a floor lamp defectively wired which came in contact at the floor with the grounded frame of an operating table. There was a layer of ether along the floor. The resultant flash happened not to cause damage or injury but was terrifying to operating room personnel.

In another instance, deteriorated insulation inside the shell of a floor type operating lamp resulted in a bad shock to the anesthetist who simultaneously touched this lamp and the grounded anesthesia machine. In still another instance, a patient received a severe shock from an examination light inside which the insulation had gone bad from repeated washing and sterilizing. In this case the light was a low voltage type (4 volts) operated with a rheostat from the 110-volt light circuit. The rheostat was connected in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**GENERAL ELECTRIC**

series on the grounded neutral side of the circuit, so that the potential of the light shell to ground was practically the entire 110 volts. The shell and a nurse who was partly grounded both touched the patient.

Although two of the instances cited above caused bad shocks rather than explosions, none the less the conditions were serious potential explosion hazards and might equally well have caused bad short circuit flashes igniting the inflammable anesthetics.

The condition of the shell of some piece of equipment becoming "live" might exist for quite a long time without being discovered, provided no contact to ground either direct or through a person happened to occur. There is but one way to guard against the above hazard of concealed defective wiring and that is by no means a complete protection, namely, frequent and periodic tests of insulation resistance (with a megger) of practically all electrical equipment but especially portable floor lamps, examination lights and head lights. In the case of low voltage lights, rheostats preferably should not be used, but instead batteries or transformers in which the secondary is metallically entirely separate from the 110-volt primary. Means, such as polarized plugs and receptacles for always connecting the rheostat on the ungrounded side of the building circuit, would seem to be a less simple and less sure protection than the transformer just mentioned.

## The Purpose of Grounding

The general grounding of operating room equipment serves only one purpose and that is the elimination of static. The "Recommended Safeguards," published by the National Board of Fire Underwriters in 1929, include recommendations that all operating room equipment be grounded. Numerous other investigators have recommended grounding, even though the operating room be adequately humidified.

On the other hand, the report of the committee on anesthesia accidents of the American Medical Association (J. A. M. A., May 10, 1930), states: "The principal measure heretofore recommended to counteract this risk (static), has been the grounding of the anesthetic apparatus. This, however, is probably of little value unless there are metal strips in the floor which are also grounded. Even this precaution gives at best only an incomplete protection, for the most serious explosions are probably initiated by electrical discharges of static electricity developed inside the anesthetic apparatus itself. Grounding considerably increases the danger of a short circuit from the electrical illuminating current to the patient, surgeon and anesthetist."

At the present time, grounding is a controversial question to which there is no entirely conclusive answer. Unless all equipment and all parts of equipment and all persons are fully and properly grounded, something which is most difficult of accomplishment, there will result marked differences of static potential which may in some instances be more dangerous than with no grounding.

A person who has picked up a static charge and who has not dissipated this charge before entering an operating room by touching a grounded plate or other grounded object, will usually produce more of a spark in the operating room upon touching a piece of grounded equipment than he would touching ungrounded equipment. Such a slip in technique can easily occur. There is too much of the human element involved to expect grounding to be complete.

The danger of short circuits with grounded objects due to defective or deteriorated insulation which is concealed, has been pointed out. The use of general grounding as a static preventive greatly increases this short circuit hazard which involves both the danger of explosion and the danger of shock.

The opinion is submitted here that the present evidence on the whole is against the grounding method whether or not operating room atmosphere is adequately humidified, but it must be made clear that, in the absence of proper room humidity, the lack of grounding leaves no protection against static developed outside of the anesthesia machine. It means acceptance of one hazard as being on the whole a lesser evil than the other hazards which grounding introduces.

This conclusion makes doubly important the other available protective measures for control of the static hazard: (1) adequate relative humidity in the operating room air; (2) sufficient well distributed and directed ventilation; (3) prohibition of wool blankets and clothing or any other materials especially productive of static; (4) above all, proper design and operation of anesthesia equipment to reduce to the minimum the danger of static inside this equipment. The anesthesia equipment will be discussed first. This will be followed by a discussion of humidity control, ventilation and the broader subject of air conditioning.

## Anesthesia Equipment

The greatest single explosion hazard is in the anesthesia machine, together with breathing tubes and bags and mask.

The chief danger is the generation of static inside this equipment. This results from (1) motion of the parts themselves, the expanding and contracting breathing bag; (2) friction of the gases in motion through the machine and tubes; (3) contact with the machine by persons and other objects including dust covers; (4) the rolling of the machine from one location to another.

The nonconducting parts, generally rubber, are the most serious offenders. Static charges, either developed in these parts or deposited on them by the moving gases, tend to remain concentrated in small areas due to the nonconducting material, so that even a small charge so localized can create a high potential sufficient to result in an igniting spark.

## Dissipating Charges

If, on the other hand, means are provided for dissipating these localized charges so that they are spread at uniform potential through the entire machine, including the frame, the result is much less dangerous, even though the machine may not be grounded. As previously indicated, the problem is to dissipate or spread these static charges.

At the risk of tedious repetition, the methods of accomplishing this in the anesthesia machine will be amplified. These two methods are: (1) adequate humidity both inside and outside the machine; (2) metal mesh in practically continuous contact with all nonconducting surfaces, both inside and outside and with the frame of machine. Single wires or chains unless very close together are not effective because areas of perhaps several square inches of nonconducting surface remain untouched and a localized high potential charge may possibly be built up and then discharged to the adjacent conductor. The spiral wire commonly used in tubing is likely to break off at its point of attachment to the ferrule at the end of the tube, thus providing a perfect spark gap at the end of a static collecting wire.

At best, metal wires or mesh or chains are less effective than humidity because the latter permeates to all surfaces making them conductive.

Adequate humidity inside the machine, breathing tubes and bags, is obtainable in three ways: (1) bubbling of gases, including oxygen and air (if used) through water; (2) placing water in the breathing bags and moistening tubes and mask immediately prior to starting anesthesia; (3) using the rebreathing method to the fullest possible extent, thereby retaining the moisture and adding that given off by the patient.

The first two of the above sources of humidity will more than likely prove inadequate if rebreathing is not used most of the time. Bubbling gases through water does not necessarily cause the gases to become thoroughly moist. Water in breathing bags will

dry up during an extended anesthesia, the moisture being quickly taken up by the continuous supply of new dry gases.

Accidents attributed to internal machine static have been so numerous that it is strongly recommended that all three of the above means for maintaining humidity in the anesthesia machine and tubes be regularly used.

As already pointed out, adequate humidity inside the anesthesia apparatus serves effectively to spread internal static uniformly from nonconducting parts to the entire machine, including the metal frame. It may be argued then that this frame should be grounded to carry away such charges. This is doubtful wisdom for reasons given under the discussion of grounding. The answer then, in the absence of such grounding, is:

1. If by internal humidity or by metal mesh conductors over the nonconducting surfaces, static charges are uniformly spread throughout the anesthesia equipment, the resulting electric potentials will be greatly reduced and, further, there should be little or no difference of potential between any two adjacent inside surfaces, thereby virtually eliminating inside sparks.

2. With the entire inside passages of the anesthesia equipment at a different potential from nearby persons and equipment, this potential difference will come to the outside of the conducting metal parts, rather than the outside of the nonconducting parts. To get rid of any such potential difference without spark necessitates either adequate room humidity or a ground connection. Thus, proper relative humidity in the operating room becomes doubly important. In conjunction with proper relative humidity inside the anesthesia equipment, it provides protection for the machine as well as against static sparks elsewhere in the room.

At the beginning of this entire discussion, it was pointed out that two of the fundamentals in guarding against the anesthesia explosion hazard are the handling and use of inflammable anesthetics in the smallest possible quantities and the minimizing of the escape of the anesthetics into the room. It may well be repeated that the use of the rebreathing method to the maximum extent consistent with other requirements accomplishes these fundamental purposes and at the same time serves to keep the inside passages of the anesthesia equipment thoroughly moist and therefore reasonably free from dangerous static potential differences.

Even though the rebreathing method be used to the fullest extent, there still remains a distinct hazard at the end of the anesthesia period when the mask is removed. The patient is then breathing out into the room a highly explosive mixture in considerable quantities, and a similar mixture is likely to escape from the breathing tubes. Great care should be exercised at this time to permit no sources of ignition anywhere near the patient. It should prove a worth while safeguard to close the mask promptly with a moist rubber cap (or otherwise) and as soon thereafter as possible to flush out the machine and tubes with carbon dioxide.

It is of great importance in the design of the anesthesia machine that reducing and mixing valves be such that there is no possibility of any of the inflammable gases mixing at high pressure (cylinder pressure) with oxygen or nitrous oxide, the result of which would almost certainly be an immediate explosion.

It is perhaps needless to say that the anesthesia machine, tubes and mask must be kept tight. There is likely to be enough hazard in the exhalation of the explosive mixtures during induction and at the end of the anesthesia period upon removal of the mask without adding the hazard from leaking apparatus and mask.

## Value of Air Conditioning

In view of the great importance of maintaining proper relative humidity and securing proper ventilation in operating and anesthesia rooms, it would appear in order to discuss briefly the general subject of air conditioning.

A modern system of complete air conditioning involves: (1) temperature control; (2) relative humidity control; (3) uniform and adequate circulation and ventilation; (4) cleaning the air and possibly removing wholly or in part certain noxious gases, such as sulphur dioxide which occurs quite generally in some quantity in many soft coal burning districts.

Two of the above (humidity and ventilation) are practically indispensable to the proper safeguarding against the anesthesia explosion hazard. The third, temperature control, goes hand in hand with relative humidity control. These same three also govern the rate of heat liberation from the human body and consequently determine bodily comfort. The importance of cleanliness, especially in operating rooms, calls for no amplification.

With an air conditioning system, the air supply may be all fresh outside air with the exhaust fans discharging entirely to the outside, or for purposes of economy, some of the exhausted air may be recirculated through the conditioning equipment, thereby conserving heat in winter and refrigeration in summer. For operating rooms, it is important to get rid of the anesthetic gases. Therefore, recirculation, except possibly for a small portion of the air supplied, is undesirable.

Proper circulation and distribution of air are important. Such distribution is accomplished first by directional supply grilles, having many small fins or blades set at varying angles which cause the incoming air to spread out and not be concentrated in a narrow high velocity stream causing drafts, and second by an exhaust system which draws the air out of the room.

The location of the exhaust openings with reference to the supply openings is obviously something which must be carefully determined for each room. In operating rooms it is desirable for reasons already indicated to have the direction of circulation such that explosive gas mixtures from the anesthesia machine and head of the patient are carried away from the operating table where cauteries and spark producing surgical equipment may have to be used.

Complete air conditioning is expensive and yet for operating rooms it is difficult to conceive of a more thoroughly justifiable expenditure. It provides a safeguard against the anesthesia explosion hazard for which there is no substitute. Operating rooms are more often than not uncomfortably hot because of the sterilizers. They are generally stuffy and filled with the odors of anesthetics. These conditions are subversive of the best work on the part of the surgeon and other operating room personnel.

A complete and well designed air conditioning system corrects these conditions, but it is important to understand that every installation calls for a thorough study by a competent engineer and careful selection of types of equipment and arrangement to suit the requirements of the individual case.

## The Next Best Thing

Where it is temporarily impossible for financial reasons to install an air conditioning system (with or without summer cooling), the next best thing from the standpoint of the anesthesia explosion hazard is to install humidifiers of which there are various makes and types on the market. Steam from sterilizers must not be depended upon for adequate relative humidity. Preferably these humidifiers should be automatically controlled by humidistats, but if this is not done, then they may be manually controlled by constant reference to hygrometers (instruments indicating relative humidity). There should be a hygrometer in every operating and anesthesia room and in the adjacent corridor, regardless of whether humidity is provided and automatically controlled by an air conditioning system or otherwise.

[A proposed code of safeguards against the anesthesia explosion hazard, compiled by Mr. Phillips, will appear in the May issue of The MODERN HOSPITAL.—Ed.]

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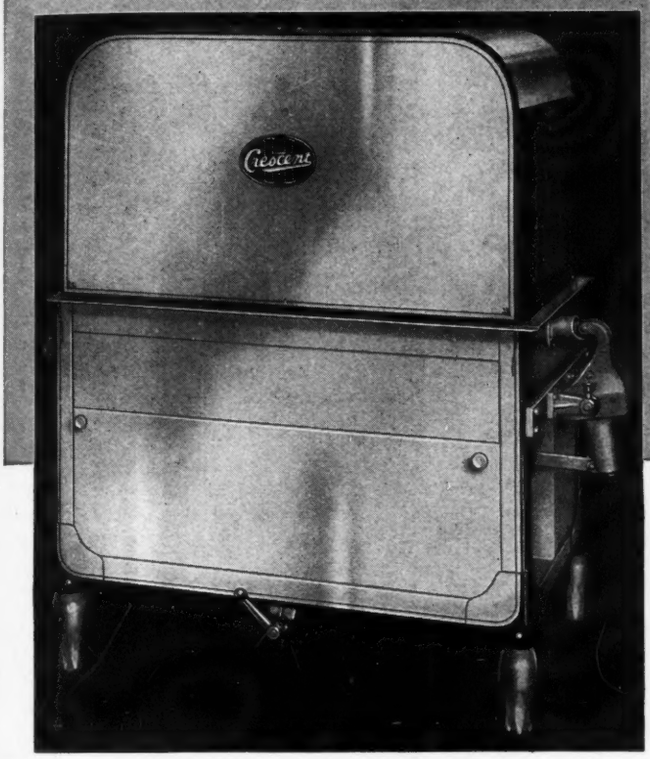


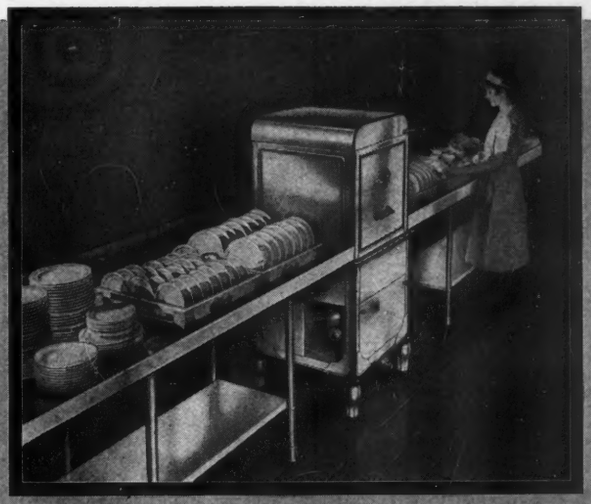

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## A New Obstetrical Table

By Malcolm T. MacEachern, M.D.

Associate Director, American College of Surgeons, Chicago

For some time there has been apparent a need for an obstetrical table designed so that:

1. The entire table could be elevated or lowered.
2. The frame would be in one piece.
3. There would be no split table to be wheeled away.
4. There would be better provision for the anesthetist to follow the patient.
5. Shock or Trendelenburg position could be obtained in any of the delivery positions or at full length.
6. Table could be returned to full length without altering the angle of shock position and without any need for building with pillows and blocks.
7. All controls could be centralized at the working end of the table and unnecessary devices could be excluded to ensure cleanliness, ease of operation and freedom from confusion.
8. The elevating handle and the wheel controlling shock position could be on whichever side is opposite the stretcher.
9. The anesthetist's tray would be flexible in position and easily removed.
10. Quick adjustment and removal of shoulder braces, wrist restrainers and hand grips would be possible.
11. Casters would lock both wheel and swivel.
12. There could be an absence of seams at the working end of the rubber outer case of the mattress pads.

With these points in mind I have designed a table that seems to meet all the requirements.

The handle elevates or lowers the entire length of the table to conform to the height of the physician, and also to bring the table to the level of the stretcher so that the patient may be easily moved on to the table by the draw sheet. This point is important as stretchers are made in different heights and where a stretcher is lower or higher than the usual table with a fixed height, transference of the patient necessitates her being lifted or lowered. Instead of the conventional type of pedestal, the table top is mounted on a long lower frame to promote rigidity.

When the patient is ready for delivery, the attending nurse, regardless of the side of the bed she is on, slightly lifts the end of the foot section which then swings down to the lower position of its own accord. This gives the normal delivery position. For instrument delivery, the head section is rolled to the foot of the table on ball bearing wheels where it locks. For those physicians who favor a midway position, or when a shelf for the baby during the tying and severing of the cord is required, the head section may be rolled to the center of the table where it also locks. The clamps for the knee and foot rests are placed at the end of the head section so that the knee and foot rests always travel with the head section, regardless of which delivery position is used.

The anesthetist, who has been sitting at the patient's head while the table is in full length, swivels the table tray (which is hinged to either side of the frame but which is also removable) forward, and follows the patient as she is moved toward the physician, providing a free passage as there are no cross members to interfere with her entrance.

In case of hemorrhage when the shock position is required, the anesthetist or attending nurse, at a signal from the physician, may elevate the table top to the desired angle. Because the table is hinged in the center, the head section is lowering at the same time the foot section is rising, thus a good angle of shock position is obtained with a minimum of elevation. The shock position may be obtained either with the head of the table drawn down in delivery position or in its full length position. Further, the table may be returned to its full length without altering the angle of shock.

In this connection it is important to note that this is the only table that provides for the patient lying at full length in shock position, which position is, of course, obtained by rolling the head section back to the head of the table and lifting the foot section back into place, after which the legs are removed from the knee and foot rests. This eliminates the present trouble and confusion attending the placing of the patient in full length position while trying to maintain the angle of shock when a split table is used. On a split table it is necessary to build up the lower end of the table with pillows, boxes, or blocks, which is inconvenient and unsatisfactory.

Any position may be obtained without disturbing the patient.

### Chicago Housekeepers Meet

The Chicago chapter of the National Executive Housekeepers Association met March 5 at the St. Clair Hotel. The speaker was Mrs. Laura Hughes Lunde, member of the national personnel committee of the National League of Women Voters, whose subject was "Jobs and Careers." Preceding her talk Richard P. Murray of Kenwood Woolens, Inc., Chicago, demonstrated the process of manufacturing blankets. In the absence of Mrs. D. J. Wyatt of the Sherman Hotel, who was attending the fifth anniversary birthday dinner of the Detroit chapter of N. E. H. A., Mrs. Alta La Belle, Michael Reese Hospital, conducted the meeting.

## THE HOUSEKEEPER'S CORNER

• Evelyn Coolidge, second vice president of the Connecticut chapter of the National Executive Housekeepers Association, reviews briefly high spots in that organization's brief history. "Established May 4, 1935, our nucleus of twelve charter members, nurtured by realization of opportunity, increased to a family of sixteen. Undauntedly we opened our eyes to a new world where we found within our grasp methods of learning and progressing in the tempo of the times resulting in a unit now active within the profession of institutional housekeeping.

"High lights on the way record a visit from our national president, Mrs. Grace Brigham in June, when she delivered into our hands for safe keeping, Charter No. 16 — heart to heart talk by Mrs. Doris L. Dungan, president of the Philadelphia chapter of the N. E. H. A., emphasizing the necessity of continuous study — well aimed advice from our former national president, Anne Owens, a warning to prepare for the future.

"Month by month our scattered members have traveled the highways and byways to meet in the common interest of study and exchange of ideas, guided by more experienced associates whose understanding of the many inevitable problems has fostered the courage and determination to carry on. The cost of a New England climate has been curtailment of activities during January and February with consequent loss of contacts. Weather forecasts indicate: signs of spring, renewed efforts and on to Chicago."

Miss Coolidge closes her report with: "Being a woman is entirely irrelevant to me. The mental qualities which prove fitness to succeed—courage, enthusiasm, imagination, determination, fearlessness, decision, assurance, industry — these are qualities available to women as to men."

The Connecticut chapter of the N. E. H. A. suggests the following as a creed for its profession:

*The Ten Essentials of Leadership*

Genuine ability.

An eager desire to help others; pride in seeing them grow.

Ability to recognize good as well as faults in others.

Ability to treat others as persons, not as things.

A broad sense of humor; ability to take a joke on one's self.

Sense of loyalty and ability to instill it into others.

Ability to foresee and solve difficulties before they arrive.

Knowledge of more than one's own particular job.

Belief in a personal rather than a materialistic world. (Credit goes to the Mueller Brass Craftsman.)

# SAFE WEANING *to* BOTTLE FEEDING

*The Baby Regulates Breast Feeding*

*The Doctor Regulates Bottle Feeding*

INFANTS should be weaned from the breast at eight months. The season of the year is immaterial with modern knowledge of nutrition and hygiene. Gradual weaning is desirable. It is accomplished by progressively increasing the number of bottle feedings in substitution for the breast feedings.

The formula consists of 6 ounces milk, 2 ounces water, 2 teaspoons Karo for each bottle—one the first week; two the second, etc. The schedule for additional foods remains the same as during nursing. But babies unaccustomed to the bottle often refuse it as long as the breast is available. Then abrupt weaning becomes necessary, some person other than the mother giving the feedings.

The formula in abrupt weaning prepared for the entire day consists of 24 ounces milk, 8 ounces water, 3 tablespoons Karo, divided into 4 feedings, 8

| *Feeding* | *1st Week* | *2nd Week* | *3rd Week* | *4th Week* |
|---|---|---|---|---|
| 6:00 A.M. | Breast | Breast | Breast | Bottle |
| 10:00 A.M. | Breast | Breast | Bottle | Bottle |
| 2:00 P.M. | Breast | Bottle | Bottle | Bottle |
| 6:00 P.M. | Bottle | Bottle | Bottle | Bottle |

ounces each, at 4 hour intervals. The formula can be concentrated once the baby is adjusted to the bottle feeding.

Karo is a mixture of dextrins, maltose and dextrose (with a small percentage of sucrose added for flavor) practically free from protein, starch and minerals. Karo is a non-allergic carbohydrate, not readily fermentable, well tolerated, readily digested, effectively utilized and economical for both the baby and the budget.

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# FOOD SERVICE • • • • •

Conducted by Anna E. Boller, Rush Medical College

## Centralizing the Nourishment Service

By Ruby Kysar

Dietitian, St. Luke's Hospital, Denver

IN WORKING out plans for an economical and more efficient nourishment service in a small hospital, the idea upon which we began was that of centralizing the entire service — placing the responsibility on the dietary department. Before completing these plans we sent questionnaires to a number of hospitals in an effort to determine how nourishment is being handled. A brief summary of the replies to this questionnaire follows.

All hospitals served nourishment to at least some of their patients. Supplementary feedings for patients on special diets were served as ordered by the physician or as indicated by the individual diet. The majority of the hospitals served nourishment to patients as requested by the doctor or the patient. None of the hospitals served nourishment three times daily to patients on regular diets. Service to patients on liquid diets varied from a feeding every two hours to service at request only.

In the majority of hospitals the control was divided between the nursing and the dietary departments. The dietary department supplied the materials for the nourishment, filling requests sent in by the floor supervisor. Fifty per cent prepared the nourishment in the floor pantries and the other 50 per cent prepared it in the diet kitchen or the main kitchen. The amount of nourishment allowed per person varied greatly. In one case the quantity was limited only by the amount the patient wished to take. The known quantities varied from three ounces to a pitcherful per patient at each nourishment time.

### A Question

The purpose of improving on our plan was to centralize nourishment service, to conserve materials and nursing time and to satisfy the patient and fill his dietary needs. In undertaking to fill these requirements the first question to be decided was which patients were to receive supplementary feedings.

In dealing with this question, we considered, first, the patients on regular diets. These patients are given enough food at mealtimes to ensure adequate caloric intake for their recovery. It is probably for this reason that we find some hospitals serve no nourishment to patients on regular or house diets. If there is a therapeutic reason for nourishment for these patients there will be a doctor's order to cover that need. Supplementary feedings for an average patient on an average "regular" or "full" diet are not nutritionally necessary. It was decided, however, to supply nourishment for these patients twice daily — at 3:00 p.m. and 8:00 p.m.

The patient's day is long particularly in the afternoon and evening, and nourishment time divides the periods between meals. The morning nourishment is omitted because the patient's time is well occupied by baths, treatments and doctors' visits. In case the patient has not felt able to take the preceding meal, the supplementary feeding will tide him over until the next meal, while nourishment at bedtime serves to quiet the patient and induce sleep.

**The plan described here has proved satisfactory from the standpoint of the patient, the nursing and the dietary departments and is found economical**

The second consideration regarding which patients are to receive supplementary feedings and how often concerns patients on soft and liquid diets. These patients need nourishment for the reasons given above. In addition they need the extra calories supplied by these feedings, since the soft and liquid diets supply less food than the regular diets. It is not often advisable to give large feedings, therefore more frequent feedings in smaller amounts are necessary. It is advisable to supply patients on a soft or a liquid diet with nourishment three times daily — at 10:00 a.m., 3:00 p.m. and 8:00 p.m.

The last group of patients to be considered are those on special diets. They are given nourishment as indicated by the special diet ordered by the attending physician, but house nourishment can also be given unless the diet ordered calls for special nourishment. Special nourishment is handled by the student nurses in the diet kitchen under the supervision of a dietitian and has no connection with the house nourishment. It is made to meet the patient's wishes as nearly as possible, within the requirements of the diet prescription. The plan used for training student nurses makes possible the handling of nourishment for patients on special diets in this manner. The student is responsible for the patient's special diet from the writing of the menu to the service to the patient, including all supplementary feedings.

### An Answer

The answer to the question, "What patients are to receive nourishment and how often?" is that it is advisable to supply nourishment for patients on liquid and soft diets three times daily and for patients on regular diets twice daily. Patients on special diets receive nourishment as indicated by the individual diet.

The next question to be answered related to the handling of nourishment. Where must it be prepared and who should serve it? There are many ways of solving this problem of service to the patient, but in looking over the answers to the questionnaires, we find three systems in general use.

First, the materials—oranges, lemons, milk, chocolate syrup—may be sent to the floors and the nourishment prepared there and served to the patients by the nurses.

Second, the nourishment may be prepared in the kitchen or diet kitchen in amounts sufficient for the day and sent to the floors to be kept in the ice boxes and served by the nurses as desired.

Third, the nourishment may be prepared in the kitchen or diet kitchen just before each serving time and sent to the floors to be served by the nurse or her aid.

There is one other method for handling nourishment service which is in use in only one of the hospitals from which replies to the questionnaire were received. It is the most economical and fits best into the plan for centralization of nourishment service.

In this method the nourishment is prepared in the diet kitchen and taken to the floors at nourishment time by a dietary department employee who delivers it to the patient in glasses ready for consumption. The plan provides centralization of responsibility in the

dietary department and a central place for the handling of materials. Fewer persons handling these materials produces less waste. A definite knowledge of the amount and cost of materials used is possible by this method. No nourishment or materials are left in the pantries or nursing offices to become old or to be used by various employees who have no need for it. The time of the nurses is saved. Nursing time is of far more value to the patient and to the hospital than the time of a maid.

Our third question was, "How shall the nourishment be ordered?" Shall each patient order the nourishment he desires? Shall the floor nurse order nourishment in the kind and amount that she thinks will be sufficient for the patient's needs at nourishment time? Or shall the nourishment be included on the menu and sent up according to the dietitian's order? The last method of ordering is advisable as it aids in centralization of service. In order to have full control of supplementary feedings there must be a definite kind of nourishment listed on the menu so that the nurse and the patient may know what is to be served.

In case the patient desires a type of nourishment not listed, a special order blank is supplied for the order. This blank is filled in and sent to the kitchen with the daily food orders. The service of the regular nourishment involves a delivery slip made out by the dietitian listing the room numbers of patients who are to receive regular or special nourishment. This delivery slip is taken to the floors at each service time and is checked by the floor supervisor before the nourishment is delivered by the maid.

### Is a Choice Advisable?

The next question which became necessary to settle was, "Shall we give a choice of nourishment?"

A choice is advisable for two definite reasons. First, it is of advantage to the patient who has likes and dislikes. The choice of supplementary feedings as listed on the menu may be a milk drink and a fruit juice drink. Most patients are satisfied with one or the other of the liquids listed and this eliminates the necessity of many special orders. The listing of a choice also eliminates the necessity of being arbitrary in nourishment service. We do not give a choice of nourishment to ward patients on regular diets, since supplementary feedings are not nutritionally necessary. These patients are offered the regular nourishment and they may accept or refuse it. If their diet order shows that they cannot take the listed liquid, they are given a choice.

The second advantage of offering a choice is that it gives the dietitian a means of filling the dietary needs of the patient without special orders. In making the delivery slip she has two types of nourishment to choose from for patients who do not have a choice. She can list the tonsillectomy cases for a milk drink instead of orange juice. A patient listed for a regular diet without milk will be given the orange juice. In these cases the proper nourishment is supplied for therapeutic purposes without special orders from the floor nurse. Since the delivery slip is checked by the floor supervisor, any changes in the condition of the patient that may affect food intake are noted and cared for so that no mistakes are made.

The last question was, "Shall we charge for nourishment?" Since we accept the fact that regular supplementary feedings are advisable or even necessary, we should furnish them without charge. This is especially true for patients on soft and liquid diets, because, as was previously stated, frequent and smaller feedings are often advisable and nutritionally necessary. The service of nourishment to patients on regular diets is a question for each hospital to decide. If we furnish nourishment as listed on the menu, shall we charge for special orders? By special orders I mean a request by the patient for additional nourishment or for a kind of nourishment not listed on the menu; for preoperative patients who need a high glucose intake, and for patients who need to force fluids.

### A Charge Is Made

We have decided to charge for these orders whether they are to satisfy the desires of the patient or in the nature of medications. The preoperative patient would pay for glucose by vein, so why shouldn't he pay for it when given by mouth? The regular nourishment furnishes two glasses daily to the patient on regular diet and six glasses daily to the patient on liquid and soft diets in order to fill the minimum need. Any additional orders are charged for. A price list may be printed and placed on each landing so that it is available to all patients.

The care of the glasses may be a responsibility of the nursing department or of the dietary department. It is not advisable for a maid to enter the patients' rooms more often than is absolutely necessary, for this reason the nurses should collect the glasses from the rooms and have them ready for the maids who collect them from the landings approximately one-half hour after service. When the nourishment is delivered the maid makes a note of the number of glasses that are left on each landing and checks to be sure that they are all returned.

Briefly, the preceding plan sums up to the following outline.

Regular nourishment is listed with a choice for private patients. Nourishment is served to patients on liquid and soft diets at 10:00 a.m. and to all patients at 3:00 p.m. and 8:00 p.m. Patients on special diets will receive nourishment as their type of diet indicates. A charge will be made for special orders.

The nourishment is prepared in the diet kitchen in amounts indicated by the number of patients who are to receive supplementary feedings. The order for this nourishment is made out by the dietitian in accordance with the patient's diet order.

The nourishment is taken in glasses to the floors by a dietary department maid and delivered directly to the patients. This maid has a slip on which are listed the room number of the patient and the kind of nourishment he is to receive. The floor supervisor checks this slip. The special orders for which the patient is charged are put up in half-pint or pint bottles, as the case may be, and taken directly to the room with a glass for service. All of the nourishment is taken to the floors on a small hand

## RECIPES BY REQUEST

Submitted by

**Helen B. Anderson**

Head Dietitian, Scripps Metabolic Clinic, La Jolla, Calif.

•

### Orange Marmalade Cake

3 eggs
2 cups brown sugar
1 cup orange marmalade
½ teaspoon ground allspice
½ teaspoon ground cloves
½ teaspoon ground cinnamon
½ teaspoon soda
¼ teaspoon salt
3 cups flour

Beat eggs then add sugar and marmalade, beating well. Sift flour with spices, soda and salt, and add to the liquid, beating enough to mix well. Spread out the batter about half an inch thick in a greased shallow pan and bake 20 minutes in a moderate oven (375° F.). Remove from oven and while still hot frost with icing made of powdered sugar and cream, applied with a pastry brush. Cut in small squares.

•

### Baked Liver Swedish (1 large serving)

3 ounces liver
1 ounce raw apple
1 ounce prunes
1 square butter
1 teasoon flour
2 thin strips bacon

Select thick piece of liver. Cut on thick side to form a pocket. Sprinkle with salt and pepper. Fill with chopped fruit and butter. Tie together. Dredge with flour and wrap bacon around the liver. Place in casserole and add 3 tablespoons of water. Bake at 350 degrees F.

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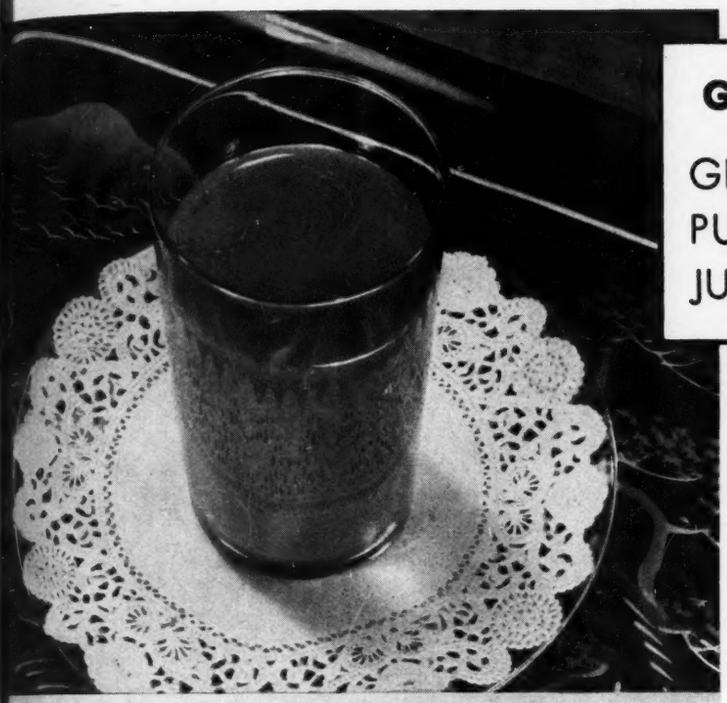

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FOR HIGH IRON AND PREGNANCY DIETS . . . a Tomato and Beef Juice Cocktail! Patients who ordinarily dislike beef juice find this drink in which the flavor of Libby's *gentle press* Tomato Juice predominates, very palatable and tasty. To make it, sear some diced beef and extract the juice. Add 2 or 3 ounces of this juice to 1 cup of Libby's Tomato Juice. Season with 1 teaspoon lemon juice and salt to taste.

● There's no other tomato juice flavor so good, because there's no other *gentle press! Gentle press* is Libby's exclusive method, protected by patent (U. S. 1,956,615).

It takes from fresh, ruddy-ripe tomatoes *only* their pure sweet juice and none of the bitterness from skin and seeds. That's why the flavor of Libby's Tomato Juice is superb!

*Gentle press* not only keeps the real tomato taste of the garden-fresh fruit. It guards the vitamins as well, assuring a high content of Vitamin C, along with Vitamins A, B and G.

Libby's *gentle press* Tomato Juice, while unseasoned except for salt, is delicious just as it comes from the can. It also makes wholesome and tempting bouillons, gelatin salads, and ices. And combines appetizingly with other juices. Why not standardize on this *finer tasting* Tomato Juice, since it costs you no more than ordinary brands? Libby, McNeill & Libby, Dept. N-59, Welfare Building, Chicago.

Libby's 100 Fine Foods include Fruits and Fruit Juices, Vegetables, Pickles, Condiments, Canned Meats, Evaporated Milk, Alaska Salmon. Each comes in regular and special sizes for institutions. In addition, Libby packs Homogenized Foods for Babies

SOFT DIETS WELCOME A DELICIOUS NEW DISH called Tomato Soufflé! To a sauce made of 2 tablespoons of flour, the same of butter and half a teaspoon of salt, add 2 well-beaten egg yolks, one cup of Libby's *gentle press* Tomato Juice. Fold in the 2 stiffly beaten egg whites and bake in a buttered ramekin in a slow (325°F) oven until firm.

truck. On the top shelf is a deep tray containing chipped ice in which the nourishment is set.

The dietary department, which is ultimately responsible for all food service, is also responsible for the nourishment service. The dietitian can be sure that the patient receives the proper feedings and she is rightly responsible for all slips that occur. The responsibility for the entire system is centralized in one department.

The nourishment is made in proper amounts and since it is delivered directly to the patient, there is none left in the floor ice boxes to become old or to be used by various hospital employees.

Patients are usually well satisfied with the regular nourishment or the choice as listed on the menu. They will often take the nourishment as listed rather than pay a small sum for a special order, thus cutting special orders down to almost nothing.

This system will save a great deal of time because the preparation of larger amounts and fewer varieties requires much less time than the preparation of more varieties in smaller amounts. The centralization of nourishment service also saves waste from preparation since it is all made by one person instead of in the various floor pantries by a different person each time.

Another means by which materials are saved in this plan is that each patient has his nourishment served directly to him and there is no danger of its disappearing between the time of delivery to the floor and the time of delivery to the patient. The savings on materials has been especially noticeable in one private hospital. The consumption of oranges used for juice dropped one case a day almost immediately. In this hospital orange juice was on the menu for choice daily after this plan was adopted.

The last point in favor of this plan has been mentioned before and that is the saving in nursing time. It may be necessary to hire one more maid but her wages will be more than taken care of by the savings of this system.

# The Diet Kitchen as a Laboratory for the Student Nurse

By Mary Louise Bone and Arvilla M. Huth
Director of Dietetics and Therapeutic Dietitian, Starling-Loving Hospital, Columbus, Ohio

UNTIL recent years, student nurses were used as extra and necessary help in the diet kitchen as well as in the wards of the hospitals which offered accredited courses for nurses. With the emphasis on the education of the student, in some cases, the diet kitchen has been closed and the serving of therapeutic diets has been transferred to the ward kitchens. In a large majority of hospitals, however, we still find the diet kitchen in which student nurses are required to spend some time, generally closely connected with the main kitchen of the hospital.

Since diet kitchen work is often disliked and considered of little value to the student nurse, it was our aim to set up a program that would provide sufficient practical work to acquaint her with the fundamentals of cookery and tray service and correlate the patient and his condition with the food which he received.

During the past five years at Starling-Loving Hospital, Ohio State University, many changes have been made in the diet kitchen routine in order to achieve this goal and at the same time serve the patient on therapeutic diet in the best manner.

In 1930 all of the food preparation for therapeutic diets was taken care of by one diet kitchen maid. The student nurse was responsible for carrying trays to the patients and returning them to the diet kitchen. The scraping and washing of dishes, pots and pans used in the preparation and serving of the food, as well as the setting up of the trays comprised the student's practical experience, and for theory there was some class discussion on tray service and types of diets. Naturally we received complaints of lack of training in diet planning among our graduates.

Our first step called for the student to study the diagnosis and diets of the patients served during her time in the diet kitchen. She visited patients with the dietitian and made a special diet study which required some reading and planning. A sample of the form given the student follows:

Special Diet Study — Student Nurses in Diet Kitchen:

1. List foods high in Ca, P and Fe.
2. List foods high in vitamins A, B, C, D and E.
3. List foods which are alkaline forming.
4. List foods which are acid forming.
5. List foods which are gas forming.
6. Plan diets for two days for each of the following conditions:

| | |
|---|---|
| thyroid | tuberculosis |
| ulcer | fevers |
| gastritis | cardiac |
| constipation | nephritis |
| diarrhea | underweight |
| anemia | gall-bladder |

7. Plan diets for two days for a normal child 1, 2, 4, 6 and 8 years of age.
8. List ten foods that are good sources of carbohydrate.
9. List ten foods that are good sources of protein.
10. List ten foods that are good sources of fat.

Realizing that little was being taught about the actual preparation of food, we reversed the duties of the maid and student. The maid was made responsible for the washing of dishes and setting up of trays, while the duties of the student were divided into preparation of hot foods, cold foods and liquids. She was assigned to each of these for a definite period of time. The nurse continued visiting patients with the dietitian and studying therapeutic diets.

While the change to this system was an improvement, it was thought that if the full responsibility for the therapeutic diet trays for one floor were given a student, she would receive a more complete knowledge of the service of the tray as a whole. Each student was assigned to the service of all therapeutic diets for one floor for a definite period. The diets were planned by the dietitian. A short class period was held twice a week at which time interesting cases and the planning of therapeutic diets were discussed. A diet study similar to the one mentioned above was required.

The criticism of this plan was that the student had so much to do in food preparation that she lost sight of the purpose of the diets which she served. We heard that there was too much routine work and that the student did not learn as much in the diet kitchen as she did on the other services in the hospital.

The opportunity finally arose in June, 1935, to put into practice a plan which had previously been worked out. The addition of a maid made it possible to carry on the work of the diet kitchen without depending on the student nurses. The following program then went into effect.

Three students come to the diet kitchen at the same time for sixty days. They are each allowed one day

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**MORE THAN ANY OTHER REGULAR, WHOLE-FAMILY CEREAL SOLD AT POPULAR PRICES FROM GROCER'S SHELVES... RALSTON PROVIDES RICHER FOOD VALUE PLUS A FULL, WHOLESOME FLAVOR THAT APPEALS TO CHILDREN AND ADULTS ALIKE.**

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Ralston is choice whole wheat, with only coarsest bran removed. That, of course, gives it, in abundance, all the body-building, energy-producing elements which make whole wheat one of our most important cereal foods.

## DOUBLE-RICH IN VITAMIN B

Pure wheat germ is added to Ralston in quantities sufficient to make it 2½ times richer in vitamin B than natural whole wheat. As a director of diets, you will realize the value of such a "double-rich" cereal as an aid to keeping appetites normally eager—promoting growth and general well-being.

## CONVENIENT and ECONOMICAL

Ralston cooks quickly—is all ready to serve as it comes from the pan. Generous servings cost about one-half a cent. For a Research Laboratory Report and samples of "double-rich" Ralston use the coupon below.


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a week and a half-day on holidays off duty. The amount and type of experience offered depends to an extent upon the number and types of diets which are served when they are in the diet kitchen. The general outline of training is as follows:

Planning and calculating of weighed diets.

Planning, preparing and serving three therapeutic diets daily.

Interviewing patients to learn food likes and dislikes to help in planning diets.

Reading charts.

Special diet study of diets not actually planned and prepared in the kitchen.

Brief case history and results of dietary treatment.

Reference readings.

Class discussion periods three times weekly on (a) current articles assigned, (b) patients on therapeutic diets and case histories, (c) diet planning.

Each student is assigned three therapeutic diets for six days, allowing ten changes during sixty days. As an example, diets prepared by a student for three six-day periods might be three diabetic diets; bland diet, nephritic and cardiac; high caloric, Sippy and ketogenic.

### Procedure Followed

For each group assigned the same procedure is followed. The patient is first visited by the student and the dietitian. Food likes and dislikes are learned. The chart is read and followed for any interesting and important changes in the patient's condition and treatment. Diets for the day following are planned by the student and checked by the dietitian. The student prepares the food, takes the tray to the patient and returns it again to the diet kitchen. In cases of a return of food on a diabetic tray, the student weighs the food left, makes the proper substitution and takes it to the patient.

The actual time spent on food preparation is considerably less, allowing more time for assigned references in the medical library, case studies and discussion.

A brief time schedule of the student nurse's day follows.

7:00-7:45 — Prepare special cooked cereals and gruels.
Complete setting up of trays with silver, cups, saucers and proper dishes for clinical and private trays.
Place fruit, jams, fruit juices, cream, butter and prepared cereals on trays.
Prepare bacon or special hot foods just before serving.
Check trays for silver, cups, saucers, bread and butter plates, sugars, creamers, and salt and pepper shakers, also cold foods.
7:45-8:00 — Place all hot foods on trays last.
Complete check of trays by dietitian.
Take trays to patients.
8:00-8:15 — Put away food used and stack soiled dishes.
Leave no disorder of your own making.
8:15-8:30 — Collect and bring trays to kitchen.
8:30-9:15 — Visit patients.
Learn likes and dislikes and plan diets for the day, choosing as many foods as possible from the regular menu.
Have diets checked by dietitian.
9:15-10:30 — Study therapeutic diets.
Case history of one new patient assigned to student for the period, or a continuation of another history.
Read charts of patients.
Reference reading.
Discussion of diets and patients for a half-hour three times weekly.
Look for attractive ways of serving foods.
10:30-11:30 — Prepare first, foods which require time in cooking or baked foods, potatoes and vegetables.
Prepare desserts and salads and place on trays unless they require refrigeration.
Place bread, butter, fruit juices, milk, on trays.
Check trays for cups, saucers, service plates, silver, sugar bowls, creamers, and cold foods as salads, desserts.
Be sure proper dishes are on clinical and private trays.
Place hot foods and beverages on trays.
Complete check of tray by the dietitian.
Take trays to patients.
11:30 — Off duty. Lunch.
3:30-4:00 — Study period: chart reading, reference reading, library work and case histories.
4:00-4:45 — Prepare salads, desserts, vegetables, beverages, as at noon.
4:45-5:00 — Place coffee and tea water and all hot foods on tray last.
Complete check with dietitian.
Take trays to patients.
5:00 — Off duty.

This system, which has been in effect since June, 1935, has proved most satisfactory. Now when the student nurse leaves the diet kitchen, she is able to calculate diabetic diets and to plan and prepare attractive trays for patients with various diseases. By visiting the patients and discussing menus with them, she realizes some of the problems of the dietitian and this is reflected by better cooperation when she returns to the floors.

The diet kitchen has thus become a laboratory for the student nurse where theory and practice are combined and the results obtained by therapeutic diets are observed.

## FOOD FOR THOUGHT

• Gertrude Brown, St. Luke's Hospital, Richmond, Va., has made some interesting discoveries in her constant effort to improve her service. In food preparation, she has found helpful the use of loose leaf notebooks for each cooking unit, with typed recipes and amounts for definite numbers to be served. She is constantly on the look-out for new and unusual recipes to avoid getting into a rut. She suggests, "Don't forget to taste, and keep up standards."

For improving the actual serving, she has separated the time of preparation and serving of floor patients' trays and graduate nurses' patients' trays. The graduate nurses go to meals while the floor patients are being served, and half-an-hour later freshly prepared food is served to the graduate nurses' patients, the nurses then being on hand to help wait on patients requiring such service.

• A problem which often confronts dietitians is that of finding out the ingredients in a commercially prepared product so as to know whether or not the food must be excluded from an allergy diet. General Foods Corporation have met this problem very nicely by recently sending out from their consumer service department a list of their products and the ingredients used in the preparation of each, also a list of the products which may be used in each of the four main allergy diets.

• If you haven't read the report of the discussion of the health value of ultraviolet light which was presented at the American Institute meeting, you will certainly want to obtain a copy of it as there is considerable explanation of the vitamin D value of irradiated milk. This can be obtained by writing to the American Institute, 60 East Forty-second Street, New York City.

• Oscar of the Waldorf, a well known connoisseur of good eating, has contributed the following recipe for use on the hospital menu:

CHEESE SOUFFLE

Put ¼ pound flour into a saucepan with 2 ounces of butter, 5 ounces grated Parmesan cheese, a pinch of salt and pepper and dilute slowly with a pint of Grade A milk. Stir the preparation on a slow fire to thicken. Leave on low fire until it detaches from the saucepan, then remove and let get cool. Now stir in a piece of butter and five egg yolks. Heat for two minutes on a slow fire stirring steadily. At the last moment stir into this five well beaten egg whites, and ¼ pound grated Parmesan cheese. Put this in buttered custard pan in slow oven until stiffened. Serve promptly.

# A CUP OF GOOD HOT TEA


*It improves the patient's mental outlook—aids in speeding his recovery*

The benefits that patients derive from drinking hot Tea frequently throughout the day are acknowledged by practically all hospital directors. They realize that a kindly cup of Tea is more calming, more refreshing, more invigorating than any other beverage.

After a day of strain that has depleted a convalescent's store of physical and mental energy, nothing so revitalizes him as does a cup of hot Tea, properly brewed. It bolsters his flagging spirits and gives his physical being an opportunity to make repairs, free from the retarding influences of a fretful mind.

Give all patients the benefits of Tea—several times a day. Not only because Tea induces both mental and physical well-being, but also because this simple service brightens the monotonous hours of those confined to hospital beds.

*"Stimulating and refreshing"*

—SAYS A WELL-KNOWN AMERICAN PHYSICIAN

**"Tea is mildly stimulating to the nervous system, refreshes the mental machinery and relieves bodily fatigue."**

## Turn to TEA Today!

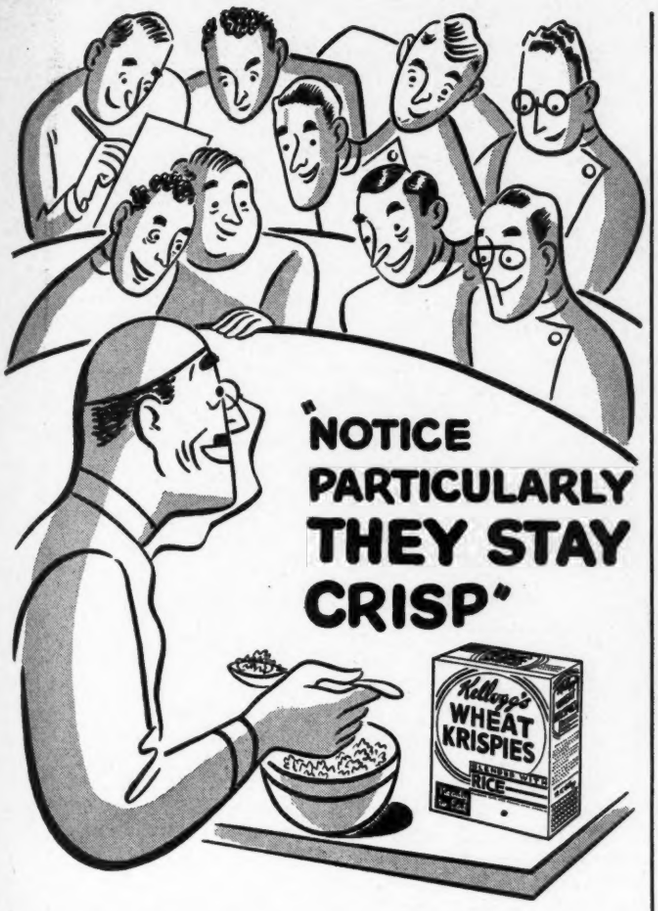
**...THE GOOD BLACK TEAS OF INDIA, CEYLON, AND JAVA-SUMATRA**

# May Dinner Menus for the Staff*

By Doris T. Odle
Dietitian, Presbyterian Hospital, Denver

| Day | Soup or Appetizer | Meat or Substitute | Potato or Substitute | Vegetable | Salad or Relish | Dessert |
|---|---|---|---|---|---|---|
| 1. | Cream of Corn Soup | Fried Halibut | Parsley Buttered Potatoes | Peas | Sunflower Salad | Apple Tapioca |
| 2. | Vegetable Soup | Liver and Bacon | Escalloped Potatoes | Spinach With Lemon | Perfection Salad | Apricot Whip |
| 3. | Cream of Celery Soup | Chicken à la King | Mashed Potatoes | Cauliflower | Waldorf Salad | Honey Crème Cake |
| 4. | Tomato Juice | Roast Ribs of Beef | Buttered Noodles | Asparagus | Gingerale Gelatine Salad | Brownies |
| 5. | Pineapple Juice | Veal Birds | Lyonnaise Potatoes | Wax Beans | Tomato Aspic | Cottage Pudding, Nutmeg Sauce |
| 6. | Cream of Tomato Soup | Meat Loaf, Tomato Sauce | Baked Potatoes | Carrots | Olives and Radishes | Chocolate Pudding |
| 7. | Grapefruit Juice | Roast Loin of Pork With Brown Gravy | Mashed Potatoes | Harvard Beets | Apricot Salad | Blueberry Pie |
| 8. | Chicken Broth | New England Boiled Dinner | | | Head Lettuce, Russian Dressing | Lemon Bread Pudding |
| 9. | Pepper Pot Soup | Swiss Steak | Creamed Potatoes | Peas | Pear Salad | Baked Apple |
| 10. | Tomato Bouillon | Baked Virginia Ham, Raisin Sauce | Au Gratin Potatoes | Lima Beans | Party Salad | Strawberry Sundae |
| 11. | Cream of Celery Soup | Roast Lamb, Mint Sauce | Julienne Potatoes | Spinach With Egg Garnish | Stuffed Prune Salad | Spanish Cream, Orange Sauce |
| 12. | Fruit Cocktail | Veal Cutlets With Dressing | | Creamed Turnips and Carrots | Lime Gelatine Salad | Chocolate Cup Cakes |
| 13. | Cream of Potato Soup | Baked Chicken | Mashed Potatoes | Broiled Tomatoes | Coleslaw | Tapioca Pudding |
| 14. | Tomato Juice | Meat Pie | Parsley Buttered Potatoes | Asparagus | Mixed Fruit Salad | Pineapple Sherbet |
| 15. | Cream of Asparagus Soup | Individual Cheese Omelet | Baked Potatoes | Creamed Onions | Pineapple With Cottage Cheese Salad | Lemon Pie |
| 16. | Tomato Bouillon | Spare Ribs | Mashed Potatoes | Cauliflower | Dill Pickles | Health Cookie |
| 17. | Philadelphia Pepper Pot Soup | Steaks | Au Gratin Potatoes | Fried Parsnips | Sliced Peach Salad | Honey Nut Sundae |
| 18. | Vegetable Soup | Liver and Bacon | Creamed Potatoes | Beets | Shredded Lettuce | Coffee Bavarian Cream |
| 19. | Broth With Barley | Pot Roast of Beef | Creamed Rice | Green Beans | Peach With Coconut Salad | Float |
| 20. | Cream of Asparagus Soup | Lamb Chops | Escalloped Potatoes | Mashed Turnips | Molded Fruit Salad | Date Torte With Whipped Cream |
| 21. | Split Pea Soup | Hamburger | French Fried Potatoes | Corn | Apple, Date and Celery Salad | Royal Anne Cherries, Cookie |
| 22. | Tomato Bisque | Baked White Fish, Lemon Sauce | Parsley Buttered Potatoes | Peas | Stuffed Prunes With Cottage Cheese Salad | Chocolate Eclairs |
| 23. | Cream of Celery Soup | Fried Ham | Baked Potatoes | Asparagus | Spiced Pears | Heavenly Hash |
| 24. | Consommé | Stewed Chicken With Biscuits | Mashed Potatoes | Glazed Carrots | Party Salad | Maplenut Ice Cream |
| 25. | Cream of Lima Bean Soup | Pork Chops, Fried Apple Rings | Au Gratin Potatoes | Buttered Spinach, Lemon | Pear With Cream Cheese Salad | Rice Pudding With Raisins |
| 26. | Tomato Juice | Swedish Meat Balls | Julienne Potatoes | Cauliflower | Perfection Salad | Cherry Tarts |
| 27. | Cream of Potato Soup | Roast Veal With Brown Gravy | Browned Potatoes | Escalloped Tomatoes | Combination Vegetable Salad | Apricot Pie |
| 28. | Broth With Rice | Frankfurters | Baked Potatoes | Wax Beans | Banana Salad | Lemon Sherbet |
| 29. | Fruit Cocktail | Baked Fillet of Haddock | Creamed Potatoes | Beets | Waldorf Salad | Burnt Sugar Cake |
| 30. | Pineapple Juice | Broiled Tenderloin Steak | Mashed Potatoes | Peas | Mixed Fruit Salad | Apple Pie |
| 31. | Vegetable Soup | Broilers | Baked Potatoes | Buttered Carrots | | Mint Ice Cream |

*Recipes will be supplied on request by Anna E. Boller, The MODERN HOSPITAL, Chicago.

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# NEWS IN REVIEW . . . .

## Social Security Act Makes Provision for National Program of Disease Prevention

Through the provisions of the Social Security Act there is beginning for the first time in the history of the United States a national program for the prevention of disease, according to Dr. Thomas Parran, Jr., New York state commissioner of health and president-elect of the American Public Health Association, who addressed a meeting of the health division of the Council of Social Agencies in Chicago on March 2.

The appropriation under the act of $10,000,000 to the U. S. Public Health Service for the development of public health in the states and research on disease prevention was the feature particularly praised by Doctor Parran, although he declared that it was only a first feeble step in the development of a true public health program.

Doctor Parran suggested the following objectives: (1) eradication of tuberculosis; (2) eradication of syphilis; (3) reduction of cancer deaths by 20 per cent through early recognition and proper treatment; (4) reduction of maternal mortality and deaths of infants in the first month of life by one-half, through the provision of adequate obstetric care on the basis of need regardless of ability to pay; (5) more widespread use of measures for discovering, treating and rehabilitating crippled children for both humanitarian and economic reasons; (6) a wider distribution of medical, dental and nursing care using tax funds to provide such service to the destitute and to assist in its provision to the lower income groups who are not destitute; (7) better use of available knowledge for prevention of pneumonia; (8) wider realization by health officers of the public health importance of environment, including housing, nutrition and employment at fair wages on useful work.

Doctor Parran suggested that, instead of health insurance or state medicine as a method of obtaining a wider distribution of medical, dental and nursing service, he preferred to see an extension of public health activities so that services might be rendered to the private physician and dentist without charge thus permitting them to care for patients at lower costs.

He urged especially that interested members of the public should watch the public health work under the Social Security Act to prevent spending funds in unproductive ways; using federal funds to relieve local budgets instead of to supplement and increase the work, and appointing health officers for political reasons.

## New York City Hospitals Show Death Rate Decrease

The mortality rate in New York City municipal hospitals shows a definite decrease for the year 1935 over past years in all municipal hospitals save Harlem Hospital, where the sustained rate of over 10 per cent is attributed to the peculiar social and economic background of the district. The municipal maternity hospital rating of 0.5 per cent is below the average for the entire United States which, over a ten-year period, ranges from 0.8 to 0.65 per cent, and is a drop of 0.3 per cent over the city's rate of 0.8 per cent for 1930.

The mortality of newborn infants shows a drop of from 5.3 per cent in 1930 to 4.3 per cent in 1935. Dr. S. S. Goldwater, commissioner of hospitals, when releasing the statistics, emphasized the difficulty of comparing the mortality rates of municipal hospitals with those of other institutions. "Many very sick patients, originally treated in voluntary hospitals, find their way, as the terminal period of an incurable illness approaches, into the wards of the city hospitals." Thus their deaths are reflected in the statistics of the municipal institutions, where even those deaths occurring within forty-eight hours after admission are recorded.

The mortality rates, in spite of the adverse selection of cases, compares favorably in some of the city hospitals with those of voluntary hospitals. Bellevue Hospital dropped from 9.3 per cent in 1930 to 6.9 per cent in 1935. Greenpoint Hospital dropped from 8.1 to 5.5 per cent, Gouverneur Hospital from 10.2 to 7.2 per cent and Cumberland Hospital from 8.7 to 4.9 per cent during the same five-year period.

Even at those institutions that handle numerous advanced or terminal chronic and incurable cases, with consequently higher rates, progress in the reduction of mortality rates has been made. Metropolitan Hospital showed a drop from 11.4 in 1930 to 8.7 per cent in 1935, while New York City Hospital dropped from 9.5 to 8.9 and Kings County Hospital from 11.8 to 9.3 per cent.

The statistical bureau of the department of hospitals, which is constantly engaged in analyzing recovery rates for individual clinic services as well as for whole institutions, is given its share of credit in the lowered death rate of the city hospitals. Quarterly figures that show unusual results in any department focus attention upon that department and its methods, resulting in an investigation and a consequent challenge to similar departments in other hospitals.

### Nursing Course Inaugurated

A course in public health nursing for Negro graduate nurses, to cover one year's work is being introduced at the St. Philip School of Nursing, a unit of the Medical College of Virginia. The course, conducted under the Social Security Act, has been approved by the U. S. Public Health Service for the training of public health nurses in eighteen cooperating states.

### Broadcasts on Group Service

Ten-minute programs, recently broadcast over various radio stations on the subject of group hospitalization, have been collected and mimeographed by the American Hospital Association and may be obtained from C. Rufus Rorem, A. H. A. consultant on group hospitalization. The use of the radio as a publicizing agent in this field has been proved successful by St. Paul, Minn., Rochester, N. Y., and New York City, where time is donated by the stations "for educational purposes." The programs describe the benefits of the plan and introduce human interest through the dramatization of experiences of those who have received hospital service.

### Psychiatric Parole Clinic Opens

A psychiatric parole clinic, recently established at the Eloise Hospital, Eloise, Mich., to examine patients in county institutions, classify them and return the mildly affected to their homes where they will be the object of a thorough follow-up system, will open on April 1. In this way needed hospitalization may be obtained for those now at large on account of the lack of adequate facilities. A branch of the clinic is to be opened at about the same time in the juvenile court building in Detroit.

## Further Suggestions by Committee on National Hospital Day Outlined

A program of possible activities to be undertaken by hospitals on May 12, proposed by the National Hospital Day committee of the American Hospital Association is presented in three parts—general activities, the hospital program and departmental activities.

The following suggestions are made for general activities on National Hospital Day:

1. Display of the flag by schools, public buildings and merchants.
2. Notification of patients through programs placed upon their trays.
3. National Hospital Day noon edition of the newspapers.
4. Designation of first baby born after midnight as National Hospital Day baby, to be, with its mother, the guest of the hospital.
5. Publication of editorials on hospitals by the newspapers.
6. Dedication of a department or new equipment.
7. Blowing of factory whistles at designated time.
8. Parade.
9. Luncheon at the hospital for civic clubs.
10. Open house sponsored by the Junior League, the ladies auxiliary or the alumnae.
11. Decorations by garden clubs.
12. Planned inspection of the hospital using route sheets that may be taken home by the guests.

For the program of the hospital itself, the committee suggests a reception for the board of trustees and the medical staff and their wives; a tea for the parents of student nurses; a homecoming for the nurse alumnae; a baby reunion; lectures by the dietitian on weight gaining and normal diets; a play; a broadcast of a community health program at night; showing of such films as "Around the Clock with Your Baby" and "Good Hospital Care"; distribution of health literature.

In institutions where open house is impractical, it is suggested that exhibits be set up in the individual departments or in a space allotted for this purpose. The exhibits outlined by the committee are:

Surgery — a detailed setup with table, gas machine.

Patient's room—types of beds or one room ready for use.

Nursery — bassinets, electric crib, posters, means used in identifying babies.

Children's ward — a child's bed as found on the children's floor.

Therapy—ultraviolet ray and infrared lamps; other equipment.

Laboratory—specimens and photomicrographs shown with stereopticon.

X-ray—series of films on fractures, heart, chest, stomach.

Oxygen tent—demonstration of use in pneumonia.

Pharmacy — medicines made from cows, iron, pigs and native drugs.

Library—cart and posters showing work.

Diet—charts and tray setups.

Guild or auxiliary—demonstration of work and products made.

Foreign bodies—collection of foreign bodies removed from patients.

## Two Vocational Guidance Pamphlets on Nursing

Two vocational pamphlets for students interested in the nursing profession have been published by the Nursing Information Bureau of the American Nurses' Association in cooperation with the National League of Nursing Education and the National Organization for Public Health Nursing.

One pamphlet, "Nursing and How to Prepare for It," has been especially written for the high school pupil, and the other, "Nursing, a Profession for the College Graduate," is for circulation among college students. Both discuss the wide variety of activities comprising nursing, the different types of nursing schools that exist and what their entrance requirements are.

Their purpose is to provide students with reliable information about nursing and with a better understanding of its opportunities. The pamphlets may be purchased from the Nursing Information Bureau, 50 West Fiftieth Street, New York City, for five cents apiece or two dollars a hundred.

### Diabetics' Primer Issued

In connection with the fourteenth anniversary of the discovery of insulin, Mount Sinai Hospital, New York City, issued a primer for the use of diabetic children containing health rules and conveying, in simple language, an explanation of the disease and the methods of maintaining good health. The booklet, which is intended to win better cooperation on the part of the child with the physician, is the work of Ella M. Coleman, assistant dietitian at the hospital, and Dr. Alfred E. Fischer, chief of the children's diabetic clinic.

## Prominent Speakers Featured on Tri-State Program

Dr. C. W. Munger, president-elect, American Hospital Association, Dr. Basil C. MacLean, president-elect, American College of Hospital Administrators, and Dr. Bert W. Caldwell, executive secretary, American Hospital Association, will be the headline speakers at the principal sessions of the Tri-State Hospital Assembly, which meets in Chicago, May 6-8.

Doctor Caldwell will open the Wednesday morning discussion on "The Adequacy of Care of the Patient" which will be discussed by Robert E. Neff, Iowa City, Iowa, Dr. James G. Carr, Evanston, Ill., Dorothy Rogers, Chicago, Dr. Lall G. Montgomery, Muncie, Ind., Dr. Edward L. Jenkinson, Chicago, Dr. John S. Coulter, Chicago, Jean Crooks, Indianapolis and Leonora B. Rubinow, Chicago.

The afternoon session will consist of group conferences of hospital administrators, nurses, dietitians, medical social workers, record librarians, occupational therapists, accountants, clinical laboratory technicians, medical staff members, hospital engineers, anesthetists and housekeepers. In the evening a special session for trustees is planned, as well as three informal dinners.

Doctor MacLean on Thursday morning will keynote on the subject of "The Adequacy of Hospital Financing." He will be followed by Sister M. Maschal, Milwaukee, Maurice Dubin, Chicago, Ada Belle McCleery, Evanston, Ill., John A. McNamara, Cleveland, and L. B. McCracken, Indianapolis. Most of the groups that meet on Wednesday afternoon will also meet on Thursday afternoon. In addition, the physiotherapists will have a special session on fever therapy, short wave therapy, education of physical therapy technicians and passive vascular exercise.

Doctor Munger on Friday will open the subject of "The Adequacy of Special Services" followed by E. C. Pohlman, Decatur, Ill., Sister Mary Hilda, Joliet, Ill., Dr. M. Herbert Barker, Chicago, Dr. H. W. Sargeant, Wauwatosa, Wis., Dr. Charles W. Myers, Indianapolis, Bertha Ellingson, Chicago, and Georgia Hukill, Chicago. The afternoon session will be devoted to two round table conferences.

### United Campaign Asks $4,448,000

The United Campaign, representing the combined efforts of the Community Fund of Philadelphia and vicinity and the Federation of Jewish Charities, opened its drive for $4,448,000 on March 23. This amount is the estimated minimum required for the support of the 141 allied agencies of the two groups.

## Purchases $28,000 Worth of New X-Ray Equipment

Additional x-ray equipment is being purchased for the New England Deaconess Hospital, Boston, with funds provided for that purpose through a $28,000 gift. A new 400 Kv. machine for deep therapy will be purchased with $20,000 of this amount and the rest used in the purchase of diagnostic equipment.

The 400 Kv. machine will be the third of its kind in the United States, one being in Richmond, Va., and the other in Cleveland. The tube at the Deaconess is to be immersed in oil, to give an advantage of shorter distance in treatment. High voltage commercial machines have been immersed, but the immersing of a high voltage tube to be used for pathologic purposes has never been tried before, according to Dr. Warren F. Cook, superintendent of the hospital.

## Manila Raising Funds for Free Teachers' Sanatorium

A campaign is now under way in Manila, P. I., sponsored by the League of Philippine Public School Teachers Association, to raise funds for the construction and maintenance of a tuberculosis sanatorium for the free treatment of teachers.

There are about 28,000 teachers in the Philippines, and they easily fall victims to tuberculosis due to the physical and mental exertion required by their work. When a teacher is discovered to be tuberculous he is immediately discharged from his duties and since the free wards of the Santol Sanatorium are always full to capacity, he usually has no chance to be cured.

It is believed that the construction of a separate sanatorium for teachers will do much to prevent the further spread of the disease by eliminating family contamination.

## New York Breaks London Record

The 62,500th subscriber was enrolled in the Associated Hospital Service of New York on March 16, and the first year enrollment mark set by the London Hospital Saving Association was passed with two months to spare. The London plan, which has now been in operation for fourteen years has more than 1,500,000 subscribers, but differs from the usual American plan in that it involves some charitable assistance for subscribers, while the New York plan pays the full cost of hospital care provided members. During the month of February 8,098 persons enrolled in New York, the highest number to join since the three-cents-a-day plan was inaugurated. Similar hospital service plans are in operation in a number of other communities in the country.

# American Medical Association Presents 1935 Statistics on Hospitals

Fewer hospitals, more beds and more patients — those are the changes another year has made in hospital service in the United States, according to the American Medical Association, which presented in the March 7 issue of the *Journal of the American Medical Association* a wealth of hospital data collected by its council on medical education and hospitals.

One person in fifteen was a hospital bed patient in 1935, the period covered by the association's hospital census; hospitals were admitting bed patients at the rate of one patient every four seconds throughout 1935. Some of the facts given in this annual hospital number are as follows:

There are 6,246 hospitals in the country, a net loss of 88 as compared with a year ago. The bed capacity of all registered hospitals is 1,076,350 beds and 53,310 bassinets, a gain for the year of 28,249 beds and 281 bassinets. The increase in capacity during 1935 is equivalent to a complete seventy-seven-bed hospital for every day in the year, including Sundays and holidays. This is in addition to replacements.

The total number of patients admitted, not counting newborn infants, was 7,709,942, a gain of 562,526 over the previous year.

The average daily census of patients was 876,689, a gain of 46,591. The average length of stay in general hospitals was fourteen days.

Two new features occur in this presentation of hospital data this year. The first is a compilation of data on the number of hospital libraries. A total of 2,749 was reported, with New York, Pennsylvania, Massachusetts and California reporting the largest numbers of hospital libraries. The second new feature is a report on hospitals that own ambulances. In all 717 hospitals reported that they owned ambulances and 533 were able to report the number of calls made during the year. They totaled 802,930 calls, nearly one-half of which were reported by hospitals in New York State.

## BEQUESTS AND GIFTS

CALIFORNIA.—A memorial hospital will be built under the terms of the will of the late Mrs. Nellie Euretta Taylor, Los Angeles, which sets aside $150,000 for construction of a hospital to bear the name of her late husband, George Wesley Taylor.

ILLINOIS.—By saving and investing her earnings as a washwoman, Mrs. Louise Koch, Chicago, had accumulated an estate of $20,000 when she died at the age of eighty-one. Among the charity groups to receive portions of the estate are the Lutheran Memorial Hospital, Chicago, $1,000; Evangelical Lutheran Sanitarium, Wheat Ridge, Colo., $1,000, and the Bethesda Lutheran Home, Watertown, Wis., $11,000. . . . A bequest of $50,000, the largest gift received by the institution since it was opened in 1930, was willed to the Evanston Community Hospital, Evanston, an institution for Negroes, by Mrs. Anna Shuman Elliot. Part of the money will probably be used in improving the physical plant of the institution, it is said. . . . Fifty thousand dollars has been left the Woodstock Public Hospital, Woodstock, by Mrs. Jeannie Lee Bentley, who died a short while ago in Pasadena, Calif. The late Mrs. Bentley was the widow of Dr. George Bentley and had lived for many years in Woodstock where Doctor Bentley had practiced dentistry.

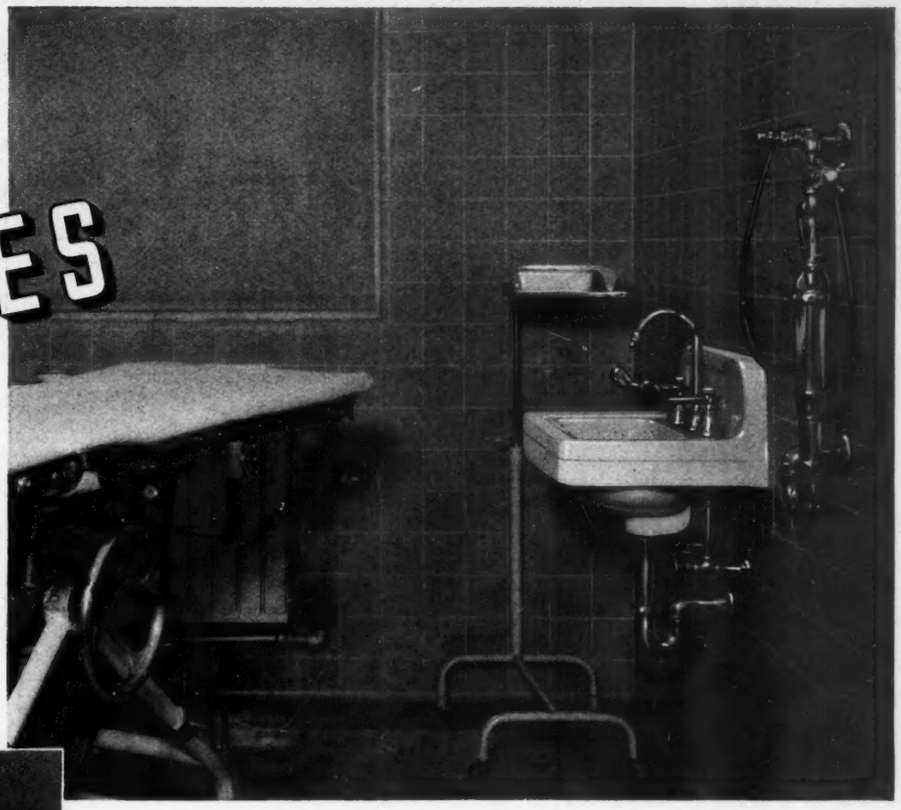
NEW JERSEY.—An unrestricted bequest amounting to about $200,000 has been made to Muhlenberg Hospital, Plainfield, by the will of the late Mrs. Vandelia B. Crawford, New York City, a former resident of Plainfield. It is thought that the money will be placed in the hospital endowment fund and used for general purposes.

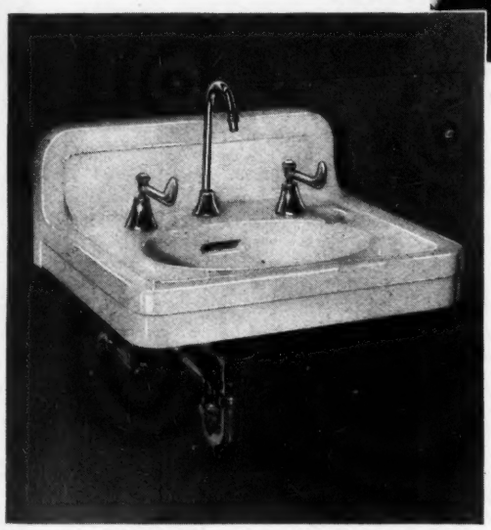
TEXAS.—Baylor University has announced a gift of a new building for Baylor University Hospital, Dallas, from Mr. and Mrs. Edwy Rolfe Brown. The unit, to be named the Florence Nightingale Building, will be planned exclusively for maternity service and will provide rooms for sixty patients and a nursery with accommodations for sixty babies.

VIRGINIA.—An anonymous gift of 250 milligrams of radium to the hospital division of the Medical College of Virginia, Richmond, was announced recently.

WISCONSIN.—The late Dr. Harry A. Sifton, chief of staff at Milwaukee Hospital (Passavant), Milwaukee, for more than twenty-five years, remembered that institution by a bequest of $214,000. This amount is set aside as a trust fund to be used by several relatives and to become the property of Milwaukee Hospital upon their deaths.

# CRANE FIXTURES FOR THE *Surgery*





*Crane NORWICH Surgeon's Lavatory of Vitreous China*

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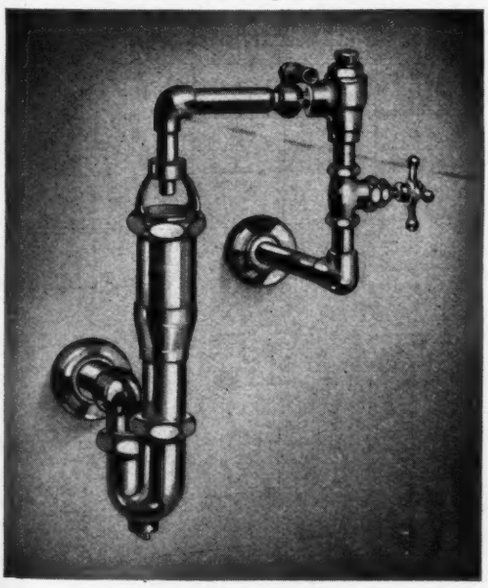
*The Crane Aspirator*



●The Crane NORWICH Surgeon's Lavatory of vitreous china and the Crane Aspirator, shown here installed in a minor operating room of the St. Charles Hospital, Aurora, Illinois, illustrate Crane equipment suited to the surgical technique, even where space must be conserved. The lavatory is wall-mounted on concealed brackets and has wrist action valves of the quick compression type, wide opening on a half turn. The aspirator—positive in action and precisely controlled—is recommended for its anti-back-siphonage characteristics.

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## Hospital Accidents Considered at New York Safety Conference

The cost of accidents in hospitals is usually at least three times the amount of premiums paid to casualty companies and figures from representative hospitals over a five-year period show that the cost per employee per year varies widely—from $3.85 to $141.70—according to a report presented by C. R. Chace, engineer, Travelers Insurance Company, Hartford, Conn. Mr. Chace addressed a special hospital meeting of the Greater New York Safety Conference on March 3.

Too much attention has been given to caring for accidents and not enough to preventing them, Mr. Chace declared, adding that every accident except acts of God can be prevented by eliminating unsafe physical conditions or unsafe acts and practices. In support of his claim regarding the hidden costs of accidents, Mr. Chace told of a stenographer who fell over a mop pail carelessly left in the hall of a hospital. She struck her head against an iron stair rail and broke her glasses. The upset water ran over the edge of the stair damaging walls and ceilings below and short-circuiting a diathermy machine. While the compensation paid was only $73.25 and the cost of medical treatment only $119.50, the total cost of the accident was over $600. These costs included hiring a temporary clerk, redecorating, repairing the diathermy machine and loss of use of the diathermy machine.

The responsibility for preventing accidents in hospitals rests squarely on the chief executive, declared John F. McCormack, superintendent, Presbyterian Hospital, New York City. While the administrator must have the assistance and cooperation of every member of the organization, accident prevention will receive scant attention from the junior executives and the rank and file if he does not emphasize the importance of a proper safety program, Mr. McCormack declared.

The safety problem of hospitals is complicated by the character of their personnel and the physical and mental condition of their patients and relatives, declared Murray Sargent, executive director, Society of the New York Hospital.

The hospital section of the safety conference was under the chairmanship of Dr. E. M. Bluestone, director, Montefiore Hospital, New York City. In summing up the meeting, he dealt with accidents in hospitals as a problem in preventive medicine.

## Minnesota to Hold 13th Annual Conference in May

The thirteenth annual conference of the Minnesota Hospital Association, to be held in St. Paul on May 14 and 15, will be attended by record librarians, anesthetists, dietitians, and superintendents of training schools as well as by hospital executives.

The program planned devotes the morning of the opening day to committee reports, but at the luncheon talks are to be given by Dr. R. C. Buerki, American Hospital Association president, on a unified plan of hospital relationship, and by Dr. W. H. Hengstler, medical legal advisory committee, Minnesota Medical Association, on the medico-legal aspects of keeping hospital records.

The new curriculum for schools of nursing will be discussed by E. Muriel Anscombe, Jewish Hospital, St. Louis, and nursing education from the medical point of view will be covered by Dr. George Earl, St. Paul, at the symposium on nursing education on Thursday afternoon.

"Fire prevention for hospitals," is the subject of the talk by Dewey Johnson, fire marshal for Minnesota, scheduled on Friday morning, to be followed by a symposium, "Providing Funds for the Operation of the Hospital." A. G. Stassel, Eitel Hospital, Minneapolis, Rev. W. Merzdorf, St. Lucas Deaconess Hospital, Faribault, Rev. L. B. Benson, Bethesda Hospital, St. Paul, and A. M. Calvin, Midway and Mounds Park Hospitals, St. Paul, are among the speakers who will take part in this symposium.

At the final session, E. A. van Steenwyk, Minnesota Hospital Service Association, is to talk on group hospitalization in the twin cities and how it can be applied to the state. The control of tuberculosis among nurses and hospital personnel will be discussed by Dr. H. A. Burns, Minnesota State Sanatorium, Ah-Gwah-Ching. Mrs. Edith Walgreen, Wilder Charities, St. Paul, will close the session with her talk on "Hospital eligibility requirements for free care either from the standpoint of the public or the private institution."

The record librarians, at their special session, will be addressed by Dr. S. R. Lee, superintendent, Ancker Hospital, St. Paul, on the unit system; by Dr. H. E. Hillegoe, executive secretary, tuberculosis division, state board of control, St. Paul, and by Dr. Malcolm T. MacEachern, American College of Surgeons, on how to secure, supervise and use medical records.

## Coming Meetings

**Alabama Hospital Association.**
Next meeting, Montgomery, Apr. 7-8.

**Ohio Hospital Association.**
Next meeting, Columbus, Apr. 14-16.

**Virginia, North and South Carolina Hospital Associations.**
Next meeting, Old Point Comfort, Va., Apr. 16-17.

**Association of Western Hospitals.**
Next meeting, San Francisco, Apr. 20-23.

**American Sanatorium Association.**
Next meeting, New Orleans, April 22.

**Pennsylvania Hospital Association.**
Next meeting, Pittsburgh, Apr. 22-24.

**National Tuberculosis Association.**
Next meeting, New Orleans, April 22-25.

**Iowa Hospital Association.**
Next meeting, Des Moines, Apr. 27-28.

**Colorado Hospital Association.**
Next meeting, Denver, Apr. 28-29.

**Washington State Hospital Association.**
Next meeting, Seattle, May 2.

**Mississippi Hospital Association.**
Next meeting, Greenville, May 4.

**Tri-State Hospital Assembly. (Indiana, Illinois, Wisconsin)**
Next meeting, Chicago, May 6-8.

**National Methodist Hospitals and Home Association.**
Next meeting, Columbus, May 8-10.

**American Medical Association.**
Next meeting, Kansas City, Mo., May 11-15.

**Minnesota Hospital Association.**
Next meeting, St. Paul, May 14-15.

**National Executive Housekeepers Association.**
Next meeting, Chicago, May 15-17.

**Hospital Association of New York State.**
Next meeting, Buffalo, May 21-22.

**American Association of Medical Social Workers.**
Next meeting, Atlantic City, May 24-30.

**National Conference of Social Work.**
Next meeting, Atlantic City, May 24-30.

**Michigan Hospital Association.**
Next meeting, Grand Rapids, May 28-29.

**Hospital Association of Rhode Island.**
Next meeting, Providence, June.

**New Jersey Hospital Association.**
Next meeting, Atlantic City, June 4-6.

**Catholic Hospital Association.**
Next meeting, Baltimore, June 15-19.

**Three National Nursing Organizations, Biennial Meeting.**
Next meeting, Los Angeles, June 22-27.

**Mid-West Hospital Association.**
Next meeting, St. Louis, June 26-27.

**Missouri State Hospital Association.**
Next meeting, St. Louis, June 26-27.

**Manitoba Hospital Association.**
Next meeting, Winnipeg, June 29-30.

**American College of Hospital Administrators.**
Next meeting, Cleveland, Sept. 26-28.

**American Protestant Hospital Association.**
Next meeting, Cleveland, Sept. 26-28.

**American Hospital Association.**
Next meeting, Cleveland, Sept. 28-Oct. 2.

**National Association of Nurse Anesthetists.**
Next meeting, Cleveland, Sept. 29-Oct. 1.

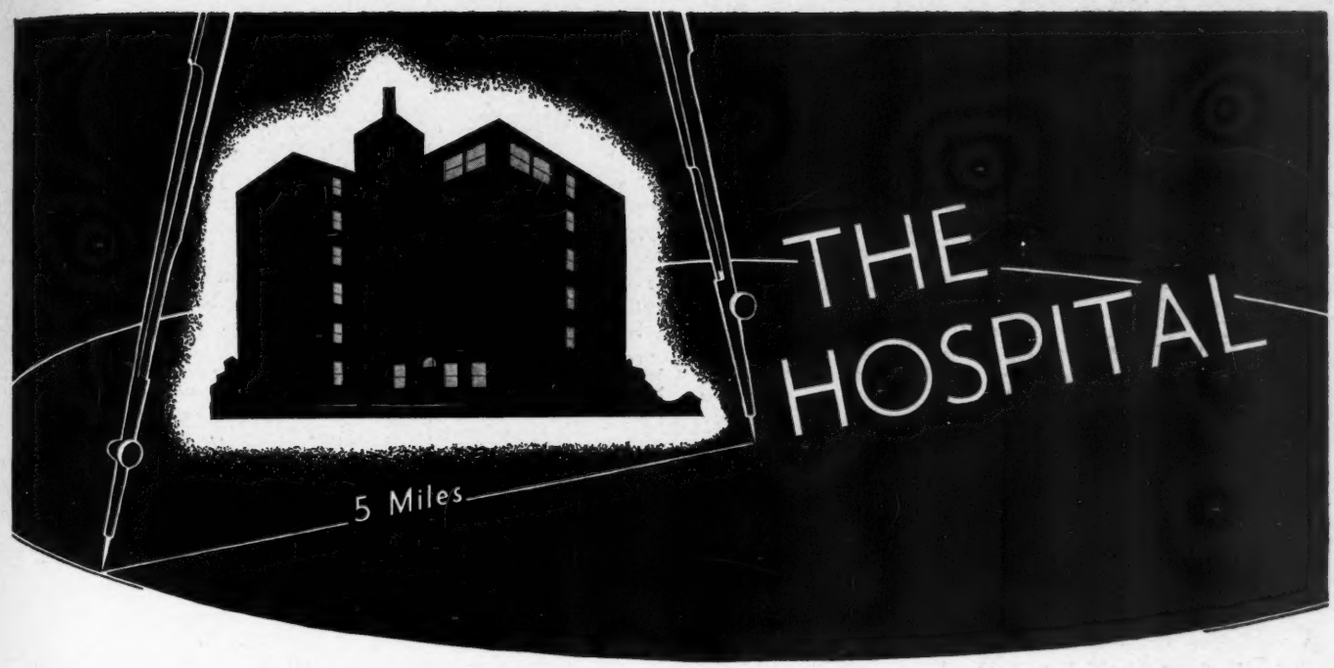
**Children's Hospital Association.**
Next meeting, Cleveland, Sept. 30-Oct. 1.

**American Dietetic Association.**
Next meeting, Boston, Oct. 11-16.

**Ontario Hospital Association.**
Next meeting, Toronto, Oct. 19-23.

## Second British Unit to Africa

The second British Red Cross unit has left for Abyssinia, its dispatch made possible by the public's response to a broadcast for funds. The Australian Red Cross has asked to be notified by the International Red Cross if another unit is needed and will probably send a complete unit of four physicians and ten orderlies, maintaining them by public subscription.

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# Varied Program Presented at Meeting of New England Hospital Association

Problems of the profession and latest ideas in dietetics engaged the attention of more than seven hundred hospital superintendents, trustees, dietitians and others interested in the management of hospitals at the meeting of the New England Hospital Association, held in Boston, February 27 to 29. An exhibition of hospital and surgical supplies and equipment in connection with the convention also attracted much notice.

A picture of dietetics "Nineteen Years Later" was presented by Mrs. Beula Becker Marble, Collis P. Huntington Memorial Hospital, Boston, and secretary, American Dietetic Association. Housekeeping problems and institutional housekeeping management were discussed by Mrs. Quindara Oliver Dodge, associate professor, institutional management, Simmons College, Boston. Sidney G. Davidson, Grace Hospital, New Haven, Conn., presided at this opening session, while Bertha W. Allen, Newton Hospital, Newton Lower Falls, Mass., led the round table discussion.

The afternoon session with Louise S. Zutter, R.N., Boston Lying-In Hospital, presiding, was devoted to nursing matters and concluded with a round table discussion led by Frances C. Ladd, R.N., Faulkner Hospital, Jamaica Plain, Mass.

### Nursing Topics Arouse Interest

Among the topics emphasized were nursing education in the out-patient department by Sister Francis James, St. Mary's Hospital, Waterbury, Conn., the education of the nurse at the present time, covered by Elizabeth E. Sullivan, R.N., Massachusetts State Board of Registration of Nurses, Boston, and the proposed new curriculum for training schools by Anne Wolf, R.N., New York Hospital, New York City. A tendency among hospitals to give up their training schools for nurses was reported, and the suggestion made that there be central training schools from which hospitals could get their nurses.

Legislation affecting hospitals was the first problem taken up on Friday by Ingersoll Bowditch, trustee, Faulkner Hospital, Jamaica Plain, who pointed out that bills get before the legislatures which, if enacted, would affect adversely the operation of hospitals generally. It was the consensus that hospital trustees should keep informed and talk matters over with their representatives in the legislature. The question also arose as to whether a hospital should carry all the ordinary forms of insurance in addition to fire, boiler and motor insurance.

The problems of the record librarian were discussed in a paper read by Eleanor Jones, Newton Hospital, Newton Lower Falls, and president, Massachusetts State Association of Record Librarians, and those of the social service department by Ruth Tartakoff, New Haven Hospital, New Haven, Conn. Social service admitting and its application to a small hospital were later described by Mary H. Roberts, Holyoke Hospital, Holyoke, Mass. Carl A. Lindblad, Homeopathic Hospital of Rhode Island, Providence, presided over this session, while Dr. G. Harvey Agnew, department of hospital service, Canadian Medical Association, conducted the round table.

The luncheon meeting, at which Dr. Nathaniel W. Faxon, Massachusetts General Hospital, Boston, explained the function of hospital councils, was under the direction of Dr. Joseph B. Howland, Peter Bent Brigham Hospital, Boston.

### Speak on Group Plans

Group hospitalization was the chief topic of the afternoon session with a contrast drawn between its application in state wide and rural communities and its application to the city, presented respectively by Graham Davis, The Duke Foundation, Charlotte, N. C., and Frank Van Dyk, Associated Hospital Service of New York, New York City. James A. Hamilton, Mary Hitchcock Hospital, Hanover, N. H., presided and also conducted the discussion.

The proposed membership structure of the American Hospital Association and its relationship to the geographical sections, and a business session, took up the major part of Saturday's meeting. Dr. Joseph P. Leone, Quincy City Hospital, Quincy, Mass., presided over this section.

A Massachusetts Hospital Association was also created during the meetings. Dr. Henry M. Pollock, Massachusetts Memorial Hospitals, Boston, was elected president; Bertha W. Allen, Newton Hospital, Newton Lower Falls., vice president; Dr. Norman C. Baker, Massachusetts General Hospital, Boston, secretary, and Warren F. Cook, New England Deaconess Hospital, Boston, treasurer.

The following officers were elected by the New England Hospital Association for the coming year: Lucy B. Abbott, William W. Backus Hospital, Norwick, Conn., president; Dr. W. Franklin Wood, McLean Hospital, Waverley, Mass., vice president; Oliver Pratt, Salem Hospital, Salem, Mass., treasurer; Dr. A. G. Engelbach, Massachusetts General Hospital, Boston, secretary.

## Allied Groups Organize at Texas Hospital Meeting

Dallas might have proclaimed the first week in March hospital week, for the Texas State Hospital Association held its convention there on March 6 and 7, the Hospital Conference of the American College of Surgeons met there on March 4 and 5, and the Texas State Association of Nurse Anesthetists and the Record Librarians of Texas each held meet ings for the purpose of organizing on March 6 and 7, dovetailing some of their meetings with the meetings of the hospital association.

The registration of members at the hospital association convention was 225, and visitors attended the sessions from Arizona, Louisiana, New Mexico and Oklahoma. Only three of the speakers on the program were from out of the state: Dewey Lutes, American College of Hospital Administrators; Dr. Bert W. Caldwell, American Hospital Association, and Dr. Malcolm T. MacEachern, American College of Surgeons.

The duties and responsibilities of a dietitian were outlined by Helen Nixon, dietitian, Wichita General Hospital, Wichita Falls, and the future of nursing by Olga Briehan, president, Texas Graduate Nurses' Association. The legislative committee of the association urged that hospitals prepare a program to fight a bill to be introduced in the next legislature permitting osteopaths to practice in tax exempt hospitals; that they sponsor a bill enabling hospitals to collect for services to indigent patients residing in other counties, and that they make more use of the lien law.

The new officers of the Texas State Hospital Association are: president, Mrs. Martha P. Roberson, superintendent, Medical and Surgical Hospital, San Antonio; president-elect, C. E. Hunt, superintendent, Lubbock Sanitarium, Lubbock; vice-presidents, Mrs. Josie Roberts, superintendent, Methodist Hospital, Houston, and Sister M. Honoria, superintendent, Nazareth Hospital, Mineral Wells; treasurer, Hazel Bennett, Shaw Clinic and Hospital, Marlin. The office of secretary is appointive.

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### Social Workers to Meet in May

More than 300 individual sessions have been planned for the sixty-third annual meeting of the National Conference of Social Work being held in Atlantic City on May 24 to 30. Approximately fifty social work organizations meet at this conference as associate groups, including the American Association of Medical Social Workers. The conference will bring together social workers from all parts of the United States and Canada.


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## Standardization Adopted for Auxiliaries' Records

A standardized method of recording financial and statistical data is being adopted by the women's social service and other auxiliaries in the voluntary hospitals in New York City.

Compiled by William A. Dawson of the New York Conference on Hospital Accounting of the United Hospital Fund at the request of the women's division of the fund, the system "follows the principles of double entry bookkeeping and permits the organization to understand the significance of its receipts and expenditures."

One accounting language is defined for the use of social service work to permit each organization to understand the work of all others. The system, prepared as a loose leaf book with instructions and forms for a five-year period, provides a basis for comparisons with other organizations, facilitates the preparation of reports, furnishes a basis for budgets and records statistics on services so as to measure cost.

### Two Councils Organize in Ohio

Two hospital councils were recently organized in Ohio, one at Cincinnati, to take in Hamilton County, the other at Akron. A. E. Anderson, president of the board of Children's Hospital, was elected chairman of the Cincinnati group with Mgr. R. Marcellus Wagner, director of the Catholic Charities, vice president; Helen B. Baird, superintendent, Christian R. Holmes Hospital, secretary, and Dr. Walter E. List, superintendent, Jewish Hospital, treasurer. Worth L. Howard, superintendent, City Hospital, is president of the Akron Council and Wilford Holcomb, People's Hospital, is secretary.

## Western Association to Convene at San Francisco

The evolution of the modern hospital to fit changing conditions is the theme of the joint conventions of the Association of Western Hospitals, the Western Catholic Hospital Association, and the Association of California Hospitals meeting with allied organizations in San Francisco on April 20 to 25.

The three associations will hold separate meetings on Monday, April 20, the general session opening that evening at eight o'clock with an address by Dr. William Mayo, Rochester, Minn. The program is then so divided that each morning is devoted to general speeches and each afternoon to administrative round tables and section meetings for housekeepers, social workers, record librarians, dietitians, nurses and engineers.

Among the speakers listed are Dr. Fred Carter, president, American College of Hospital Administrators; Dr. Robert A. Peers, president, California Medical Association; Dr. Malcolm T. MacEachern, American College of Surgeons; Dr. R. C. Buerki, president, American Hospital Association; Dr. Rufus Rorem, Julius Rosenwald Fund; R. D. Brisbane, Sutter Hospital, Sacramento; Rev. Alphonse Schwitalla, president, Catholic Hospital Association; Dr. B. W. Black, Alameda County Hospital, Oakland; Mrs. Alice Eldridge, president, California Chapter, National Executive Housekeepers Association, and Mildred Tolles, dietitian, Montana Deaconess Hospital, Great Falls, Mont.

### Physicians Campaign for $12,000

A campaign to raise $12,000 to lift the mortgage of the Battle Creek General Hospital, Battle Creek, Mich., is being conducted by the physicians of that institution, who opened the drive with personal subscriptions amounting to $4,875.25. It is the first time that the doctors have asked for general subscriptions, though since 1929 they have pledged among themselves $40,000. When the mortgage is removed from the property it will be possible for the institution to qualify for a $200.000 PWA loan to complete construction and equipment of the new hospital.

### Review Resumes Publication

The *International Nursing Review*, publication of which was suspended in 1934, has again appeared in its accustomed form and will be published quarterly. All articles in the review appear in English as well as in French and German. The first issue contains several tributes to Dr. Anna Hamilton who for thirty-three years was superintendent of nurses at the Maison de Santé Protestante, Bordeaux, and is credited with having introduced the Florence Nightingale system of nursing into France. Doctor Hamilton died on October 19, 1935.

### T. B. Convention to Be in April

Sections on the pathologic, clinic, sociologic and administrative aspects of tuberculosis are planned for the thirty-second annual meeting of the National Tuberculosis Association to be held in New Orleans, April 22 to 25, with a final joint symposium on tuberculosis among different peoples. The National Conference of Tuberculosis Secretaries and the American Sanatorium Association will meet on the twenty-second before the general meeting is opened.

## Superior Court Decision on Kern Hospital Case

A chapter in the fight between private hospitals and county hospitals was completed recently when the superior court handed down its decision on the appeal of the defendants in the lawsuit brought under the auspices of the Association of California Hospitals against the board of supervisors of Kern County's hospital at Bakersfield.

The suit, which was brought to restrain the Kern General Hospital from accepting patients who were able to pay for hospitalization, was decided in favor of the plaintiffs, and upheld in a modified form by the superior court, whose decision forbids the hospital accepting any person not found to be an indigent as defined by the court except in those cases specified by the decision or covered by state law.

The hospital is to admit indigents or dependent poor; needy sick and dependent or partially dependent citizens in case of emergency; psychopaths, narcotic addicts or habitual inebriates if temporarily in custody; physically defective and physically handicapped persons under eighteen years of age whose parents or guardians are financially unable to secure proper care and whose admission and treatment have been authorized in the manner provided by law; persons with active tuberculosis who when able to pay are required to do so; contagious, communicable or infectious cases for quarantine; prisoners, when ordered by the superior court; county employees injured in the course of their duties, and persons in need of immediate hospitalization as the result of accident or a sudden public emergency, calamity or disaster.

The Kern County hospital is appealing the decision to the state supreme court. Several county hospitals have joined in the appeal.

### Fracture Clinics to Be Graded

With 12,210 fracture cases reported by New York City's thirteen general hospitals for 1935, and a probable higher number for 1936, Dr. S. S. Goldwater has announced the appointment of a special committee to undertake a study of the fracture work in these hospitals, grading each institution according to its efficiency in this field and setting up an attainable standard equal to the record of the hospital receiving the highest rating. Dr. Fenwick Beekman is chairman of the committee which consists of Dr. Frederick Bancroft, Dr. S. Potter Bartley, Dr. Milton John Wilson and Dr. Paul K. Sauer. Fractures of the lower leg are the most frequent, it is stated.

# NEW BUILDING PROJECTS

PALMER, ALASKA.—Construction is nearly completed on the thirty-bed Matanuska Valley Hospital, a corporation hospital in the Matanuska Colonization Project that will have an obstetric department and nursery, an operating and sterilizing room, a laboratory, x-ray with fluoroscope, physiotherapy department, a dental department and a dispensary.

BLYTHE, CALIF.—The last legal objection to the construction of the new county hospital branch was eliminated by a court order allowing the city to use a portion of the city hall block as a site. This action, which conveyed the land to the city, was made necessary by a provision in the deed in which the Palo Verde Land and Water Company, now defunct, gave the block of land to the city in the early days of Blythe's history. The deed provided that if the land was ever used for any purpose other than a site for the city hall or a municipal library, the title should automatically revert to the donor.

DENVER, COLO.—A one-story, $200,000 operating pavilion is being erected at St. Joseph's Hospital, north of the present building, in the form of a T-shaped wing. The addition will contain six operating rooms, a cystoscopic room, a laboratory, physiotherapy and hydrotherapy rooms, an autopsy room, a nurses' workroom, a cast room and a doctors' lounge.

MIAMI, FLA.—A five-story main administration and private patients' building, a service building and a nurses' dormitory are under construction at the James M. Jackson Memorial Hospital in a $360,000 expansion program that will add 177 beds to the present 350-bed capacity of the institution.

MANTENO, ILL.—Work on the twelve new units of three buildings each, which will enlarge the capacity of the Manteno State Hospital, from 2,870 to 6,170, is being undertaken again with the return of warm weather. Each unit will consist of two ward buildings and a dining hall. Further construction will furnish two dormitories for employees, a diagnostic building, a mechanics building for plumbers, electricians and engineers, two smaller ward buildings, an amusement hall and eight cottages for physicians.

ST. JOHN, KAN.—Plans and specifications for a fifteen-bed hospital to be erected by Stafford County, are being prepared by Mann & Co., architects, of Hutchinson, Kan. The proposed institution is to cost $15,000.

BALTIMORE, MD.—A new unit has been proposed for the Franklin Square Hospital to provide quarters for sixty-five patients, including a maternity ward. Plans for the $175,000 building have been prepared by Crisp and Edmunds, architects.

ROXBURY, MASS.—A new three-story building is planned for the Greater Boston Bikur Cholim Hospital which will increase the bed capacity of the Jewish hospital for chronic diseases to nearly one hundred. Eisenberg and Feer are the architects.

BEACON, N. Y.—The kitchen, bakery and dining room at the Matteawan State Hospital are being reconstructed and remodeled at a cost of $250,000.

NEW YORK, N. Y.—A twelve-story and penthouse nurses' home and school is under construction at St. Luke's Hospital, made possible through the Mary Ann Fitzgerald legacy. To be known as the Eli White Memorial Building, the structure has been designed to accommodate 300 student and graduate nurses. It will face the hospital building across 114th Street, the lower stories of limestone and the upper of light brick. The first floor will have a general reception room, a loge, an information room with a switchboard and postoffice, a library, a living room and a general assembly room, two stories high, to seat 290 persons. Dining rooms will be on the second floor and classrooms on the third. The fourth to the tenth floors will be occupied by bedrooms, each floor having a kitchenette and laundry, the tenth floor will have a gymnasium, the eleventh, an infirmary, and the twelfth, sun decks and an enclosed recreation room. Water tanks and machinery for the building's elevators will be housed in the penthouse.

MALVERN, PA.—A new children's building, to be erected near the site of the old pavilion which burned so tragically in January, is to go under construction this month at the Country Branch of Rush Hospital of Philadelphia. When completed, the building will have accommodations for forty children, adequate provision for exits and a fire extinguishing system.

PHILADELPHIA, PA.—Plans have been announced for the erection of two buildings at the Philadelphia Hospital for Mental Diseases, Byberry, to house 2,000 patients. Each building is to be one story high, fireproof, of hollow tile, steel and concrete construction. For the temporary housing of patients, two abandoned school buildings near Byberry are being taken over by the city and will be arranged to accommodate 100 patients each.

## Trust Fund to Rebuild and Rename Pasadena Hospital

A trust fund of $2,600,000, established through the will of the late Henry E. Huntington for use in the erection of a hospital in the vicinity of Los Angeles, will be employed in the purchase and rebuilding of the Pasadena Hospital, Pasadena, Calif., since the trustees of the fund do not wish to establish another hospital.

The institution will operate as a non-profit organization. Under the terms of the will it is to be named the Collis P. and Howard Huntington Memorial Hospital, and it is hoped that in time it will become a medical center and later a research center for Southern California.

The obsolete buildings which comprise the Pasadena Hospital will be razed and a four-story fireproof structure built in their place. The grounds are to extend 175 feet from the building and will be landscaped.

## Hospital Builds New College

A million dollar medical school building is to be erected behind the present Flower Fifth Avenue Hospital, New York City, according to an announcement made by Dr. Claude A. Burrett, dean and director of the New York Medical College and Flower Hospital. Construction of the nine-story building which besides containing accommodations for teaching four classes of seventy-four medical students will house a nurses' training school, a nurses' home and an out-patient department, will be begun as soon as the architects' plans are ready.

## To Conduct Surveys

In preparation for expansion and modernization programs, the Glens Falls Hospital, Glens Falls, N. Y., and the House of St. Giles the Cripple, Brooklyn, N. Y., have each retained Charles F. Neergaard, consultant in hospital planning, organization and management, to conduct surveys regarding their needs. Milton L. Crandell, architect, is preparing sketches of the proposed changes at Glens Falls Hospital.

## Flying Hospital in England

A flying hospital, that carries doctors and nurses, and has accommodations for stretcher, sitting and walking cases, has been installed in a 42-seater air liner by the British Red Cross Society. Sick and injured persons are now being carried from outlying districts to central hospitals in case of emergency. It is the aim of the organization to establish a chain of aerial Red Cross stations over all the United Kingdom.

# NAMES IN THE NEWS • • •

DR. EDWIN S. BENNETT has been appointed superintendent of Olive View Sanatorium, Olive View, Calif.

DR. C. C. AVEN was recently elected president of the medical and surgical staff of Georgia Baptist Hospital, Atlanta, Ga.

DR. EDGAR SYDENSTRICKER, at one time the chief statistician of the United States Public Health Service and one of the organizers of the health section of the league of nations, died on March 19, at the age of fifty-four. Doctor Sydenstricker was the brother of Pearl S. Buck, the author.

DR. L. P. RISTINE, superintendent of Cherokee State Hospital, Cherokee, Ia., has been appointed superintendent of Mount Pleasant State Hospital, Mount Pleasant, Ia., to succeed DR. M. CHARLES MACKLIN who resigned April 1. DR. MARK C. WHEELOCK, a member of the staff at Cherokee State Hospital has been made assistant to Doctor Ristine. DR. CHARLES OBERMAN, head physician at the Hospital for Epileptics and School for Feeble-Minded, Woodward, Ia., will take over the superintendency at Cherokee.

DR. WILBUR P. RICKERT, associated with the medical staff of the Pennsylvania Railroad, has been appointed director of Philadelphia Hospital for Mental Diseases, Byberry, Philadelphia, where he succeeds DR. JAMES P. SANDS.

ELIZABETH REED, one time assistant superintendent at the Methodist Hospital, Philadelphia, and later assistant superintendent of Abington Memorial Hospital, Abington, Pa., and Frankford Hospital, Philadelphia, was recently elected superintendent of Newcomb Hospital, Vineland, N. J.

DR. J. D. THOMAS, superintendent of Clark County Tuberculosis Sanatorium, Springfield, Ohio, resigned in protest at a $1,200 salary cut, instituted, according to the trustees, as part of a retrenchment program. Doctor Thomas has been superintendent of the institution for eight years.

DR. ROBERT LEE HARRIS, superintendent of Cleburne Hospital, Cleburne, Tex., died recently.

DR. JAMES DANIEL BAUCUM, superintendent of Gregg Memorial Hospital, Longview, Tex., died at Alexandria, La., following a heart attack.

DESSA SIMMONS has been appointed superintendent of the Deaf Smith County Hospital, Hereford, Tex. BARBARA LANDRUM has been acting superintendent of the institution.

JAMES A. HAMILTON, superintendent of Mary Hitchcock Memorial Hospital, Hanover, N. H., resigned recently in order to accept the office of superintendent at City Hospital, Cleveland. E. P. DRISCOLL has been acting superintendent of the institution since WILLIS J. GRAY left last June.

SHIRLEY CAREW TITUS, professor of nursing education and dean of the school of nursing, Vanderbilt University, will join the staff in public health and nursing education at the summer session of the University of California at Los Angeles.

MRS. RUBY B. GILBERT has resigned the superintendency of West Texas Hospital, Lubbock, Tex., and C. J. HOLLINGSWORTH, financial agent of the hospital has been appointed to succeed her.

DR. ALBERT BUCK, superintendent of New Haven Hospital, New Haven, Conn., has been elected president of the Connecticut Hospital Association.

J. WILSON KELLER, formerly assistant superintendent of the Lenox Hill Hospital, New York City, has been appointed superintendent of Lawrence Hospital, Bronxville, New York. He took office March 12.

MILDRED WATCHER has succeeded LOLA M. PHILLIPS as superintendent of Titusville City Hospital, Titusville, Pa.

DR. RUDOLPH MATAS, chief senior surgeon at Touro Infirmary, New Orleans, and former president of the American College of Surgeons, was recently elected president of the International Society of Surgery at the tenth triennial surgical congress held in Cairo, Egypt. Doctor Matas is the second American to hold this office, and will preside at the Vienna meeting in 1938.

ESTHER SIURUA, assistant superintendent of Jackson County Hospital, Pascagoula, Miss., has been elected acting superintendent following the resignation of DELIA MONEY, who left to be married.

The REV. ARTHUR J. BYAS, superintendent of Evangelical Deaconess Hospital, Chicago, died at the hospital following a month's illness. Doctor Byas was also pastor of the Second Evangelical Church, Chicago, at the time of his death.

PHILENA FREDERICK is the new director of nurses at Berkeley General Hospital, Berkeley, Calif. Before her appointment she had been assistant superintendent of nurses at the University of Minnesota Hospital, Minneapolis.

R. H. WHARTON has been appointed executive director of the Alabama Hospital Service Association.

DR. SILAS WELTMER, who has been acting superintendent of Spring Grove State Hospital, Catonsville, Baltimore, since the resignation of DR. ROBERT E. GARRETT, has been named superintendent of the institution.

DR. JOHN W. LAWLAH, assistant medical director, Provident Hospital, Chicago, has been named medical director and superintendent of that institution, effective April 1, to succeed ADMIRAL NORMAN J. BLACKWOOD, who has resigned.

DR. MALCOLM LA SALLE HARRIS, former president of the American Medical Association and internationally known surgeon, died at the Milwaukee Sanitarium, Wauwatosa, Wis., where he had been a patient for more than a year. At the time of his illness, Doctor Harris was chief of staff of Henrotin and Alexian Brothers Hospitals.

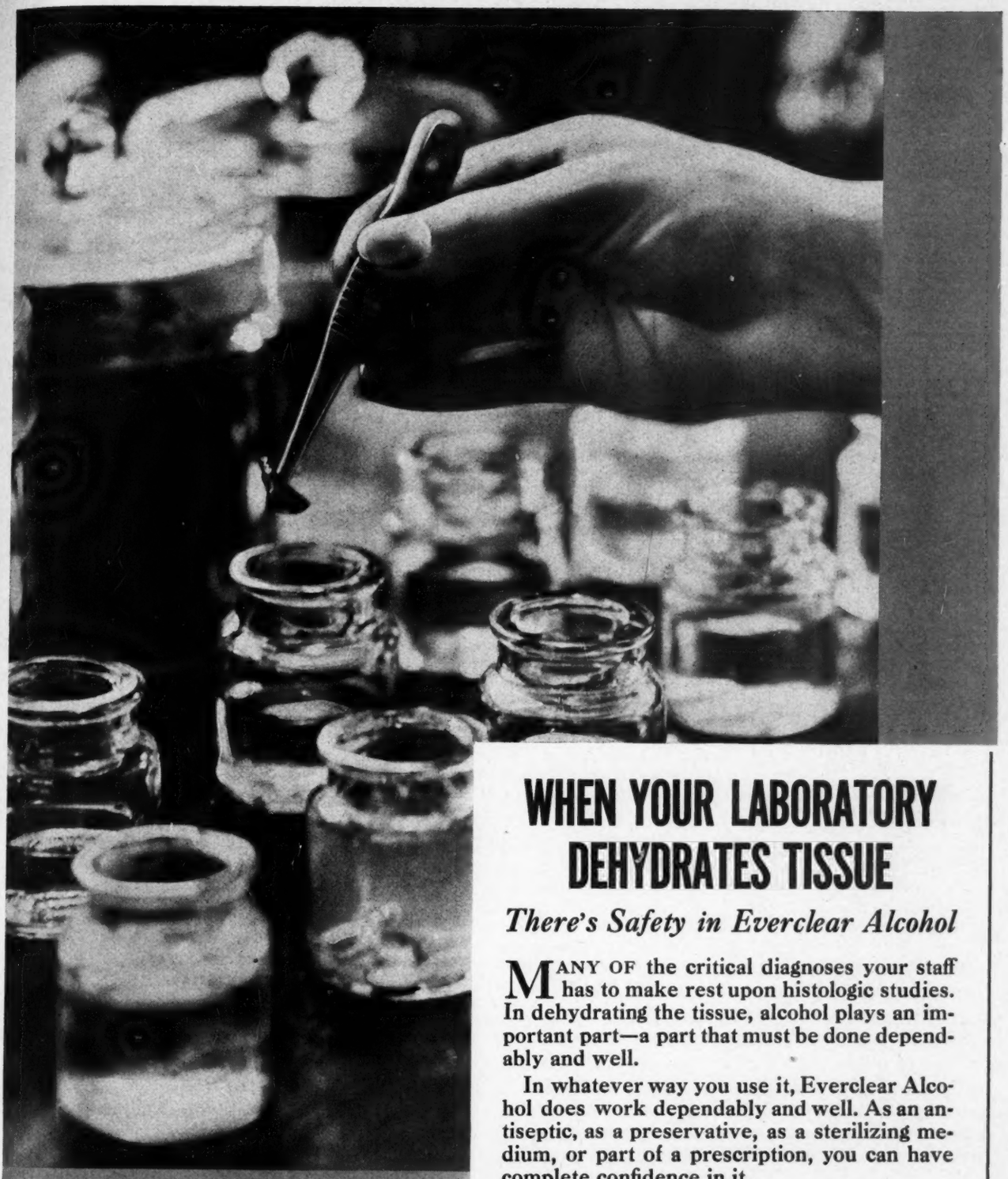
DR. A. H. SMITH, superintendent of Pleasant View Sanatorium, Amherst, Ohio, resigned on March 16 to return to private practice.

## Dr. Parran New Surgeon General

Dr. Thomas Parran, Jr., assistant surgeon general, U. S. Public Health Service since 1926 and commissioner of the New York State Department of Health since 1930, has been announced as the new surgeon general to succeed Dr. Hugh S. Cumming who retired in February. Doctor Parran has been associated with the health divisions of Illinois and Missouri as well as of New York State, and is chairman of the scientific committee of the Commission on Research in Syphilis.

## To Study European Hospitals

Hospitals in England, France and the Scandinavian countries will be the subject of a study to be made this summer by C. Rufus Rorem, associate director for medical services of the Julius Rosenwald Fund and consultant on group hospitalization to the American Hospital Association. His research in particular will apply to the financial relations between government and voluntary hospitals, professional relationships between general hospitals and private medical practice, and the administration of contributory plans, health insurance and endowments as they affect hospital, professional and financial policy in these countries. Upon his return, Doctor Rorem will give a report on his observations at the Cleveland convention of the American Hospital Association, which will take place in September.



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# LITERATURE *in* ABSTRACT • • •

Conducted by E. M. Bluestone, M.D.

## Price and Type Comparison in Turkish Towels

Fourteen turkish towels from the competitive market, varying in price from $0.14 to $1.50 each, were tested for physical properties — thickness, weight per square yard, breaking strength and water absorption.* These towels were grouped according to construction into four types, thus:

Type 1, having a single-ply ground warp with half as many ground as pile ends; Type 2, having a single-ply ground but an equal number of ground and pile ends; Type 3, having two-ply ground warps with half as many ground as pile ends, and Type 4, having two-ply ground warps equal in number to the pile ends. The prices ranged from lowest to highest from Type 1 to Type 4.

The results showed Type 1 to be lowest in all properties except water absorption; Type 2 to be medium in weight and high in strength as well as absorption; Type 3 to be high in thickness, weight, and absorption, but of medium strength, and Type 4 to be low in absorption and high in all other properties. The physical properties tend toward higher values as the purchase price increases.

*Hayes, Margaret B. and Elmquist, Ruth E.: Properties of Turkish Towels, J. Home Economics, Nov. 1935. Abstracted by Ernestine Merritt.

## Morticians and Medical Society Unite on Autopsy Practices

An important step was recently taken by a joint committee on autopsies, composed of representatives of the Medical Society of the County of Kings and the Metropolitan Funeral Directors Association, to establish a more complete understanding between hospitals and funeral directors in Brooklyn, N. Y.* The report issued by this joint committee outlines the important suggestions and recommendations that will serve the best scientific interests of hospitals without creating difficulties for funeral directors.

These are as follows:

1. All information required for the death certificate should be secured when a patient is admitted to the hospital. The entries should be typewritten.

2. Each new group of interns should be instructed in methods for securing postmortem examinations and the issuance of death certificates by an experienced member of the hospital staff. The members of the house staff should know the cases for whom they may issue certificates; the cases that must be referred to the medical examiner; the list of unacceptable diagnoses, and the rôle of the funeral director. The visiting staff should take a positive cooperative attitude toward securing postmortem examinations.

3. Sound argument should be the basis for securing consent for postmortem examinations. High pressure methods should not be employed. If the funeral director is present, he should be permitted to participate in the discussions.

4. Any interference by the funeral director with the proper efforts of a hospital to secure consent for a postmortem examination should be reported to the joint committee.

5. The release of a body should be scheduled at a time convenient for the pathologist and the funeral director, always keeping in mind the plans and wishes of the bereaved family.

6. The examination should be performed in a manner that will permit the embalmer to preserve the natural appearance of the body. The funeral director should be informed by the pathologist in every instance where extraordinary dissection is necessary.

7. The executive officer of a hospital should forbid hospital employees to recommend funeral directors. A list of qualified funeral directors should be on file in his office.

8. All persons handling bodies should exercise care to keep the head and shoulders of the deceased elevated at all times. This precaution is of considerable help in preserving the appearance of the body.

*Report of the joint committee on autopsies of the Medical Society of the County of Kings and Metropolitan Funeral Directors Association, Metropolitan News, Feb. 1936. Abstracted by Morris Hinenburg, M.D.

## Use of Analgesics in Childbirth

In an editorial*, the *Lancet* shows that a good proportion of parturient women are cared for by midwives and therefore cannot expect any alleviation of pain except from drugs like laudanum and bromides which they are permitted to use. Since none of these sedatives were effective during the second stage of labor 20 minim capsules of chloroform were introduced but this was soon questioned.

An intensive study of analgesics was suggested by the British College of Obstetricians and Gynecologists. Although special reference was made to the use of chloroform capsules by midwives, the investigation was widened to cover the efficacy and safety in the hands of various groups of administrators of nitrous oxide, of paraldehyde and of chloroform given in three different ways.

It was decided that paraldehyde per rectum did not give desired relief, that nitrous oxide required special apparatus and training and was expensive and that chloroform was accompanied by certain dangers.

Since chloroform capsules give good results, it is natural to inquire more closely into the reasons for the conclusion that they should not be used by midwives acting alone. A critical review of the chloroform mishaps reveals that in few instances where chloroform capsules were given according to instructions, were they the cause of mishaps.

In another report gas and air was considered safe and satisfactory, yet its use is expensive. However, at Wellhouse Hospital, Barnet, midwives have been trained in its use and cost has been reduced to two shillings per case.

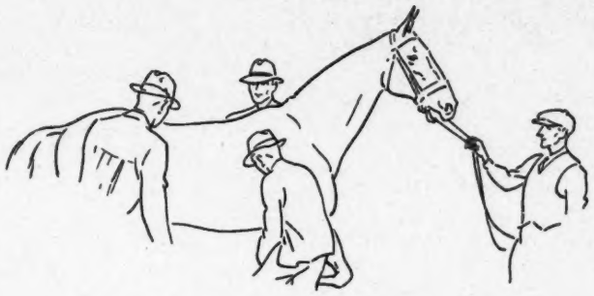
*Safety *Versus* Comfort in Childbirth, Lancet, I:319 (Feb. 8) 1936. Abstracted by S. Wimpfheimer, M.D.

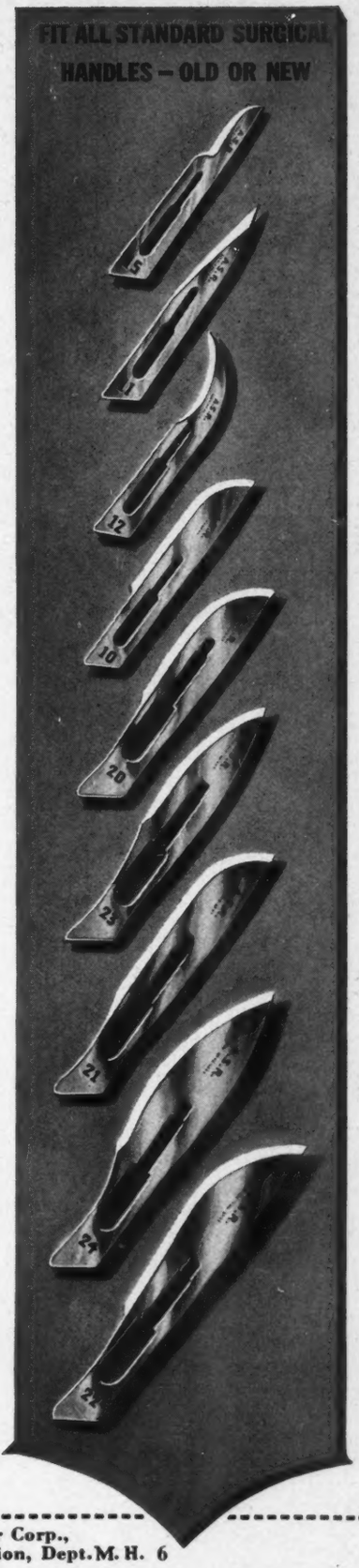
## A Meat Diet in Relation to General Health and Teeth

The first article in this series* introduces the idea of living on meat alone, the possibility of which is now the firm conviction of the author. This is the underlying theme of all three papers. In 1906 he went to the Arctic with the food tastes and beliefs of the average American, but by 1918, after eleven years with the Eskimos, he had, through personal experience and observation, shed most of these beliefs. During the first winter he lived on unsalted fish and water, enjoying it and keeping in good health throughout. There was no evidence of hardening of the arteries, high blood pressure, breakdown of the kidneys or rheumatism, in his case or among his men or the Eskimos.

Part 2 of "Adventures in Diet" deals with the experiments undertaken by the author and a colleague at Bellevue Hospital, New York City, in 1928, at which time, under the careful supervision of Dr. Eugene DuBois, of the Russell Sage Institute of Pathology, and Dr. Clarence Lieb, the subjects started on an exclusive meat diet which lasted a year under the conditions of ordinary city life.

The results of the experiment were that the subjects were in "a little better than average" health during the year. They enjoyed and prospered on the meat in midsummer as well as in midwinter, and they liked it as fat in July as in January. They averaged



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about one and one-third pounds of lean and a half a pound of fat a day, which, converted into energy units, means that they obtained three-quarters of their calories from fat. Thus the diet was not so very high in protein.

Only one fear of the experimenters was realized, namely, that the diet would be low in calcium. In spite of this apparent deficiency, the subjects were healthy, just as, judging from a study of skeletons, are Eskimos and other meat eaters.

Part 3 of "Adventures in Diet" deals with the relation of meat to scurvy, and with the effect of meat diets on teeth. The author cites the disastrous experiences of Robert Scott's two expeditions to the Antarctic, when scurvy raged although the best medical advice was available concerning the prevention of scurvy and a stock of fresh fruits and vegetables had been obtained in New Zealand. On Ernest Shackleton's expedition, which followed Scott's first one, the men ate seal and penguin instead of fruits and vegetables, because they had not brought sufficient food with them. In spite of this comparatively careless management, there was never a sign of scurvy. Stefansson himself cured three men who developed the disease on his third expedition by feeding them boiled and slightly frozen raw meat. The author concludes that it is best to find your antiscorbutics where you are.

The second section of this article, by summarizing the author's own and other anthropologic studies on meat eaters, shows that dental caries and pyorrhea seem to be totally absent in the mouths of peoples who live wholly on meat, while caries has often developed when a mixed diet was introduced.

*Stefansson, Vilhjalmur: Adventures in Diet, Harper's Magazine, Nov. and Dec. 1935, Jan. 1936. Abstracted by Elise Davis.

## Pitfalls Awaiting the Physician

The author's* purpose is to remind the practitioner of various pitfalls in medical and surgical treatment. His creed is "Be wise in time, learning from the mistakes of others to avoid some at least of our own."

He reminds the reader of the serious consequences of an undiagnosed acute pyogenic infection, especially of bones or joints, and the ease with which it may be mistaken for acute rheumatic fever. Compound fractures must be handled from the onset as an emergency of the greatest magnitude for only in the first hour or two can a débridement be effectual in maintaining an aseptic wound.

Radiographs must be taken of all injuries in which there is a possibility of fracture. The author cites such examples as fractures of the scaphoid, impacted fractures of the neck of the femur, fractures of the ulna associated with dislocation of the head of the radius, fractures around the shoulder joint and fractures of the spine which may easily be unrecognized by physical examination alone. Further x-ray examinations must be made to confirm the reduction of the fracture and also later to determine the extent of union.

The old wooden splint must be discarded in favor of plaster of paris. The latter can be made to fit the limb, while with the former the tendency was to make the limb fit the splint. A splint must be fitted with the proper degree of tightness; it must immobilize the fractured area and not immobilize parts which should be permitted to function. Pain, persisting after a fracture has been reduced and immobilized, is a danger signal. Ischemic contractures can be avoided by the careful application of completely circumferential splints and by watching the circulation in the limb.

Mention is made of the possibility of surgical relief of arterial embolus if diagnosis is made early. The reader is warned of the occurrence of abdominal symptoms in Pott's disease as well as the dangers of incising a cold abscess. The insidiousness of childhood deformities is brought to mind with a word of caution as to following the line of least resistance, for it may prove an unfortunate path.

*Girdlestone, G. R.: Avoidable Disasters. Brit. M. J., 1:349 (Feb. 22) 1936. Abstracted by Arthur H. Aufses, M.D.

## Interrelationship Problems Studied by A. C. of S.

The eighteenth annual meeting of the hospital standardization conference held during the 1935 clinical congress of the American College of Surgeons at San Francisco and Oakland devoted itself to the many problems dealing with the relationship of the governing authorities of hospitals, administration, medical staff and patients to each other. The bulletin* presents in brief form the papers and the discussions dealing with these problems. Following is an outline of the subjects treated in the bulletin.

Dr. Robert B. Greenough, president of the American College of Surgeons, in opening the conference, places considerable emphasis on establishing proper limits for economies which, if carried too far, may endanger the maintenance of proper standards of service to the patients. Dr. George Crile defines the standardization program as one to promote the right care of the sick and injured in hospitals and to establish and maintain the proper educational environment in the hospital so that the physician and his associates, co-workers or aids may give the most scientific care to the patient.

Dr. Malcolm T. MacEachern in his 1935 survey of hospital standardization points out that bed occupancy has increased, economic and financial conditions are better, physical plants are generally well maintained though new construction is still restricted, and hospital administration is improving. He points out the importance of efficient medical staff organization, proper audit of clinical work, establishment of a satisfactory system of medical records and adequate laboratories and scientifically organized clinical pathologic conferences. He notes the advances in x-ray service, anesthesia and its improved methods, surgical and obstetric services. He advises that there is much to be done to check sterilization procedures, control infections and to restrict major surgical privileges.

The bulletin goes on to deal with:

1. The integrity or conscience of the medical profession and its ethical standards.

2. The influence on the hospital of social changes which bring with them plans for health insurance, hospital insurance, medical service bureaus, periodic prepayment plans, deferred payment plans, all intended to make medical care available to all who require it but cannot afford it.

3. The opportunities for training in surgery in hospitals approved by the American College of Surgeons.

4. The organization and administration of an oxygen therapy service in a general hospital, a service that should stand the tests of clinical and scientific efficiency, of immediate use for a number of patients at any one time, of simplicity and of economical operation.

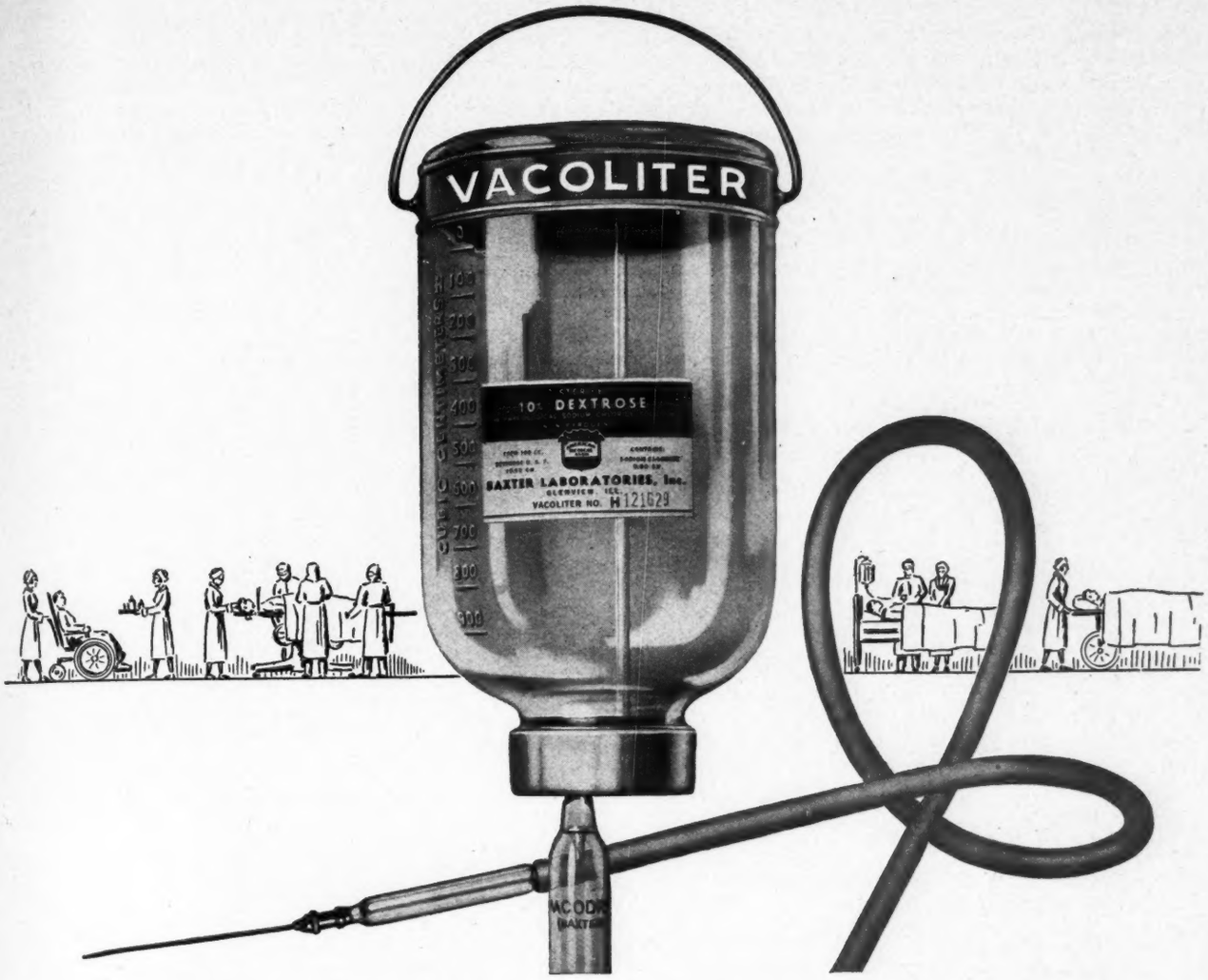
5. The duties and responsibilities of an accredited pathologist in an approved hospital.

6. The future of the voluntary hospital beset by reduced income from pay patients and increased free service, reduced contributions and endowment income, and the unwillingness of the government to help the voluntary hospitals by subsidies for their patients or by discontinuing its competitive hospital construction program.

7. The application of the principles of hospital standardization from the viewpoint of the hospital trustee, the medical staff, the hospital administrator, the clinical pathologist, the radiologist, the medical educationist, the nurse, the dietitian and the economist.

8. Innovations in hospital equipment and supplies supporting the purchase of quality equipment by properly drawn specifications which will ensure the purchase of the proper item for a specific use at the best price.

9. The institutional care of chronic and convalescent patients.




# BAXTER'S SOLUTIONS IN VACOLITERS HAVE AN UNMARRED RECORD OF CLINICAL SERVICE

BAXTER, the pioneer producer of commercial ready-to-use solutions in Vacoliters, tested Baxter's solutions for three years in a selected group of hospitals before advertising them to the profession.

For years they have been in constant daily use in thousands of American hospitals. This constitutes a notable record of clinical testing by actual clinical use in the field of intravenous therapy.

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10. A hospital program of public relations.

11. The provision of adequate service at costs within the reach of the patients served, as well as adequate service for the indigent.

12. The educational program for doctors, nurses and others caring for the sick.

13. The organization and management of the business department of the hospital, minimum standards for a hospital pharmacy as well as the organization and management of the pharmacy service, the food service and the x-ray department.

14. The medical records from the viewpoint of the physician, the surgeon, the ophthalmologist, the otolaryngologist, the obstetrician and the medical record librarian, as well as their use from the standpoint of group study.

*Bull. A. C. S., March, 1936. Abstracted by Morris Hinenburg, M.D.

## Developing a "Surgical Conscience"

Doctor Greenough, in his address as retiring president of the American College of Surgeons, expresses fears that the material advances in surgery have in a measure overshadowed spiritual and moral forces.*

The conscience of the surgeon will enable him not only to determine what is right but to do what is right. The sick place their confidence in physicians on faith and hope rather than on personal knowledge of their experiences and abilities. This is especially true of the surgeon, whose skill and intellectual honesty are better known to his colleagues than to his patients.

Physicians and surgeons possess the virtues and vices of other human beings. There is little to distinguish a student matriculating in a medical school from others starting in the other professions. He soon learns to accept the importance of his personal responsibility to patients and is made aware of a "surgical conscience." Graduates of medical schools and hospitals as a rule carry on the ethical standards of the hospital staff under whom they are trained and if these are not high the ethical standards of the profession in the community suffer.

After an internship and a residency, now almost everywhere required for specialization in surgery, the young surgeon secures a license to practice surgery. The surgical conscience, if developed, will limit him to the branch of surgery for which he is qualified. The American College of Surgeons may be credited to a large degree with the establishment of the high ethical standards observed by approved hospitals.

It is the author's conviction that a surgeon should establish his own clinical critera for operation. His responsibility begins when he accepts a patient, and nothing should influence his judgment other than the diagnosis and the indications or contra-indications for operation.

The conscience of the surgeon plays a large part in the matter of fees. The author advocates a discussion of fees before the services are rendered, to avoid misunderstanding with the patient or his family. He treats this subject at length and in a manner that is to be commended for careful perusal by every hospital administrator.

Physicians should select surgeons for their patients on a basis of merit and not on a split fee basis.

The golden rule should govern the attitude of a surgeon toward his colleagues. In these trying times the rule, however, has lost some of its popularity. The patient's welfare is of primary importance. The conscience of the surgeon should guide him in advertising his accomplishments through the presentation of papers at medical meetings. This may be overdone when the presentations are unimportant. Newspaper or other publicity is forbidden in the interests of the public, who may otherwise be exploited by incompetent and unscrupulous physicians.

*Greenough, Robert B.: The Conscience of the Surgeon, S., G. and O., Feb. 15, 1936. Abstracted by Morris Hinenburg, M.D.

## Training the Young Surgeon

The possession of a diploma gives a legal right to its holder to apply all known methods in the alleviation and cure of disease. The author* feels that to this legal right must be added a moral right to employ specialized (surgical) procedures which require additional experience, training and judgment. In hospitals connected with medical schools, and in some of the larger medical centers, there are postgraduate courses in surgery, but the number of surgeons so trained cannot meet the need for qualified men throughout the country.

A committee of the American College of Surgeons is considering ways and means of training surgeons and the author gives his idea of how the facilities of approved hospitals may be used in such educational work. The groups to benefit will comprise not only interns and residents, but also practicing physicians affiliated with the hospital staff.

Case histories and physical examinations should not be regarded too lightly and the attending staff must be responsible for the accuracy and interpretation of the findings. The history and physical findings will decide which laboratory tests must be made. It is important for the surgeon to be able to interpret the laboratory findings in relation to the patient. When the "work-up" is completed, house and visiting staffs should confer and study the case.

Operating room technique is taught to the intern. The approved hospital can train the surgeon in operative judgment and manual dexterity by furnishing clinical material from charity services. It would be unfair to grant unlimited operating room privileges to the beginner, but when done under the guidance of experienced hands it is an educational method of merit. The pathologic conditions seen in the operating room must be supplemented by training in the pathologic laboratory and autopsy room.

Staff meetings and conferences based upon hospital material are fitting occasions for graduate studies when combined with the more didactic discussions of the medical societies. With the aid and interest of the staff acting as instructors, approved hospitals may be the training ground for many young surgeons.

*Abell, Irvin: Opportunities for Training in Surgery in the Approved Hospital, Bull. A. C. S., 21:13, 1936. Abstracted by Arthur H. Aufses, M.D.

## Commercial Preservation of Fresh Fish

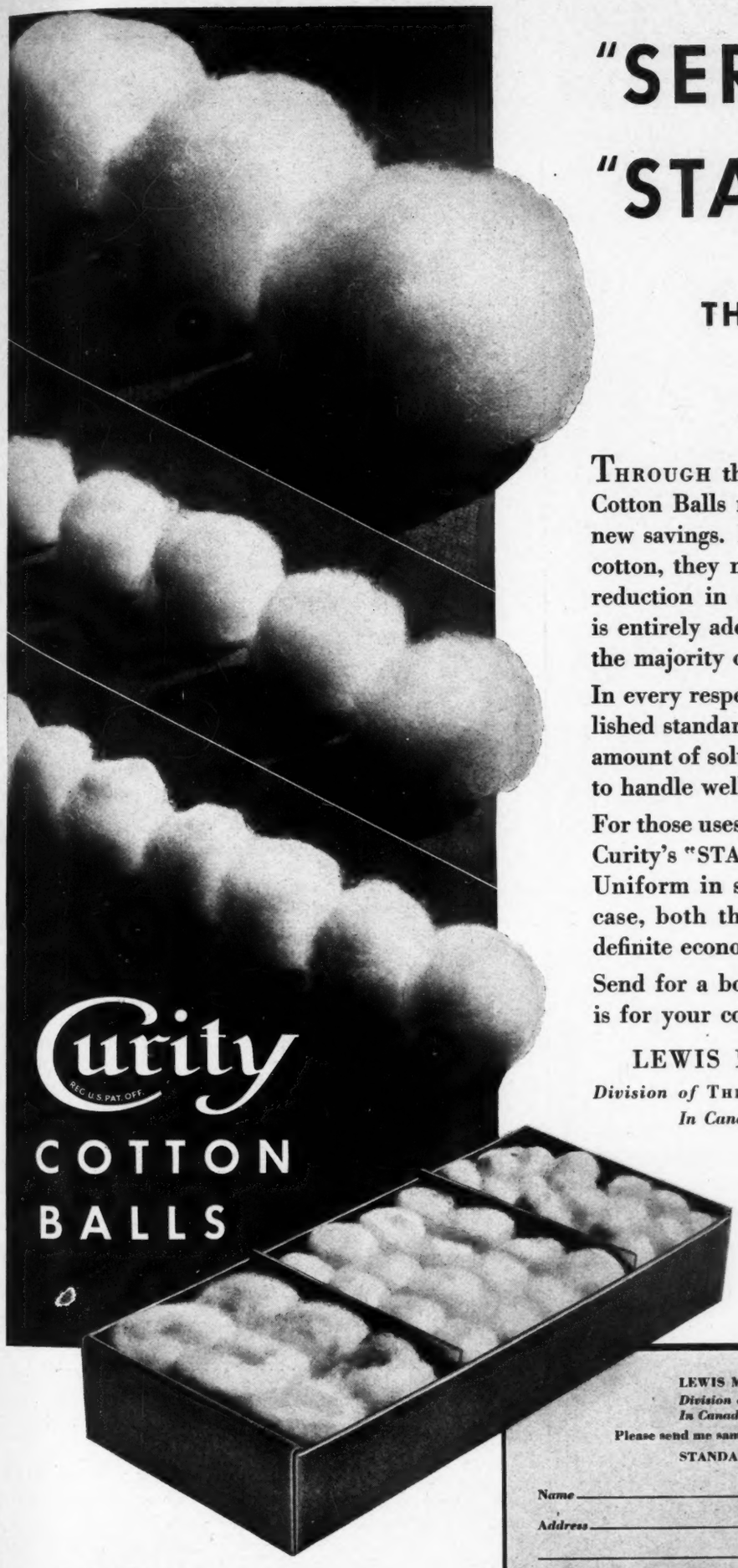
The United States Bureau of Fisheries conducted a series of experiments to determine the feasibility of using carbon dioxide in the handling and transportation of fresh fish under commercial conditions obtaining in the United States.*

The investigation was restricted to haddock, this being fairly representative of a nonfatty fish. Fish in the experiment were divided into two lots; one was designated as the control and was packed in ice without carbon dioxide and the other was stored with both ice and gas. At intervals the fish were withdrawn and subjected to a series of chemical tests and bacterial counts.

After three days of storage the fish packed with carbon dioxide were better than that packed in ice alone. After a week or more the beneficial effect was decidedly evident. The beneficial effect of the gas was manifested only when used with haddock just passing out of rigor mortis. No deterioration takes place until after rigor mortis; therefore, the carbon dioxide, which retards decomposition, would be of no definite value as long as the fish remains in rigor mortis.

This problem has economic and public health significance in fishing regions, in which a week may elapse between the time the fish are caught and the time they are landed by the fishing vessel.

*Carbon Dioxide in Preservation of Fish, J. A. M. A. 106:470 (Feb. 8) 1936. Abstracted by Myrtle Weinstein.

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In every respect these cotton balls meet established standards. They retain a fully adequate amount of solution and keep sufficient "body" to handle well during swabbing.

For those uses where better quality is required Curity's "STANDARD" Cotton Balls are ideal. Uniform in size, a guaranteed number per case, both these ready-made products offer definite economies over hospital-made balls.

Send for a box of free samples — the coupon is for your convenience.

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STANDARD ☐ SERVICE ☐ Cotton Balls.

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# BOOKS ON REVIEW

COMPLETE HANDBOOK ON STATE MEDICINE. *By J. Weston Walch, Chief Compiler. Portland, Me.: Debaters Information Bureau,* 1935. *Pp.* 158. $2.50; *extra copies to same school,* $0.75.

This is one of several debate handbooks which appeared during 1935 to assist students engaged in interscholastic and intercollegiate debates on the question: Resolved: That the several states should enact legislation providing for a system of complete medical service available to all citizens at public expense. The volume includes a study outline arranged in eight lessons; affirmative and negative briefs; rebuttal notes, and suggestions on debate.

Being neither experienced nor otherwise expert in the art of debating, I am not competent to judge this volume as a debate handbook. I have, however, read it as one who is familiar with the subject of the debate and the literature. It has been difficult for me to remember, while reading, that "a debate," in the words of this handbook, "very closely resembles an advertising campaign. The debater is out to sell his ideas on the proposition to a group of three judges."

If you give adequate recognition to this function of a debate, you can understand much that finds its way into a debate handbook. The reader who is familiar with the source material will find sense, common and uncommon, quoted side by side with nonsense. The present document is only little concerned with distinctions between evidence accumulated in careful, objective studies and opinions expressed in letters to the author of the handbook from persons informed and uninformed. If one accepts the dictum quoted above as to the debater's goal, it is possible to accept all this. Yet none of this, however otherwise defensible, justifies or explains a confused presentation of the subject matter of the debate itself.

The debate student must have a clear and unusually acute mind if he is to grasp the meaning of the debate question and the main categories of the argument from the eight "lessons" presented in the study outline. The existing confusion concerning the boundaries of state medicine, public medicine, socialized medicine, health insurance and group payment becomes worse confounded the further one goes into this text. Although the compiler uses the publications of the Committee on the Costs of Medical Care freely and profusely, he apparently has no real understanding of the nature of the committee, its membership, how it worked or the actual composition of its majority and minority groups. Some of his gratuitous remarks about the committee and its alleged prejudices are borrowed from its most vicious critics.

The volume is of an awkward size and poorly printed. It would be difficult to give the book a warm recommendation. — I. S. FALK.

BAPTISM OF THE INFANT AND THE FETUS. *An Outline for the use of Doctors and Nurses. By Rev. J. R. Bowen. Dubuque, Iowa: The M. J. Knippel Co.,* 1935. *Pp.* 12. $0.25.

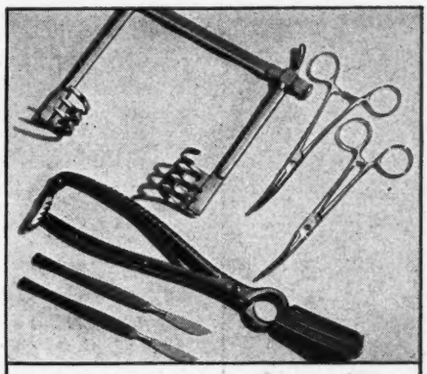
This treatise by the chaplain of St. Joseph's Mercy Hospital, Dubuque, Iowa, covers the subject of Catholic baptism in the hospital from several angles. Directions are given for baptism of the premature fetus, baptism in uterus, and other similar emergencies.

# SAVE up to $1.00 a GALLON

## ON DISINFECTION COSTS

## *and Play Safe with Dependable "Lysol"*

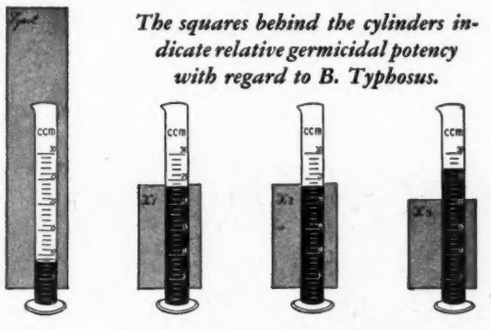
**HARMLESS TO SKIN...** Used in the correct solutions, "Lysol" is harmless. It contains no free alkali to irritate sensitive membranes.



**HARMLESS TO INSTRUMENTS...** "Lysol" does not dull instruments, but actually *counteracts corrosion.*

**HARMLESS TO RUBBER...** Unlike some other disinfectants, "Lysol" will not cause deterioration in rubber or fabrics.

## Why "Lysol" is more economical than "cheap" disinfectants




*The squares behind the cylinders indicate relative germicidal potency with regard to B. Typhosus.*

**Fig. 1...** Above graph compares effects of "Lysol" and of 3 ordinary cresol disinfectants on B. Typhosus—showing relative quantities, per gallon of solution, required to kill the germs at 20° C in 10 minutes.

*The squares behind the cylinders indicate relative germicidal potency with regard to Staphylococcus aureus.*

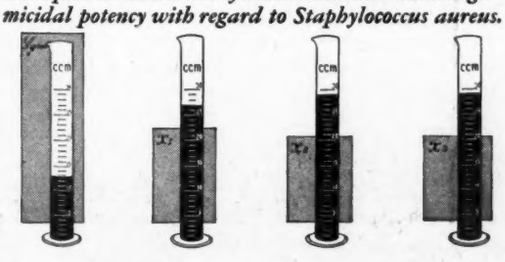



**Fig. 2...** Above graph compares the effects of "Lysol" and of 3 ordinary cresol disinfectants on Staphylococcus aureus, showing relative quantities, per gallon of solution, required to kill the germs at 37° C in 10 minutes.

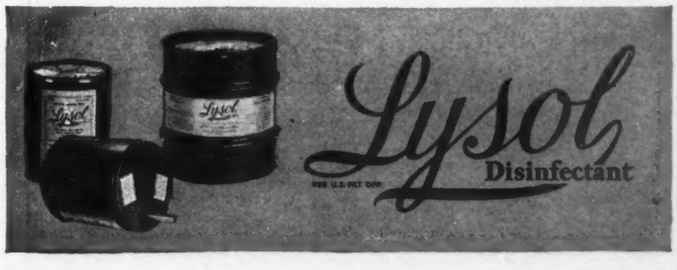
SUPPOSE you pay 80c per gallon for a U.S.P. cresol compound, while "Lysol" costs $1.25. In order to make 100 gallons of solution—with minimum germicidal potency officially required for general disinfection—you must use $2.25 worth of the cresol compound (phenol coefficient 2)—but only $1.25 worth of "Lysol" (phenol coefficient 5).

Thus for each gallon of original disinfectant, the U.S.P. cresol compound costs $1.00 more than "Lysol." "Lysol" is standard in leading hospitals for operating room use, and essential in disinfection of rubber equipment, instruments, etc., because it cannot harm them. But many hospitals fail to realize the savings they can make by using "Lysol" for *all* disinfection. By buying "Lysol" on our special hospital contracts, you pay—

**As low as $1.25 per gallon**

. . . on 50-gallon contracts, delivered 10 gallons at a time as required. For details, address: Lehn & Fink, Inc., Hospital Dept. MH-4, Bloomfield, N. J.





# NEW PRODUCTS • • •

## Headliner in X-Ray Equipment

Invention goes on as usual in the x-ray field. Scan, for instance, an announcement from Standard X-Ray Co., 1932 North Burling Street, Chicago, describing the Model B 220 KV Deep Therapy Tube Stand. One learns that the new therapy stand is unusually compact; it is flexible; it is safe electrically because the shockproof cables are covered with metal braid, which is grounded; it is safe mechanically because of an especially developed chain suspension, automatic lock and filter indicator. The latter, by the way, shows whether the x-rays are on or off; whether the radiation shutter is open or shut, and what filter or combination of filters is in use.

## Up Stream With New Directory Register

Progress invades the area of the information desk—someone again proves there is a newer and better way of doing things. Proof is the Cummings directory register, news of which comes from Tacoma, Wash. (Wycum Mfg. Co. of that city makes the equipment). The register, placed at the desk near the main entrance, is available to telephone operator and staff and duplicate registers operated electrically from the main board may be installed in the surgery or anywhere else.

In the surgery register, colored lights are used to designate the classification of surgeons (as senior major or junior major). All members of the staff are indicated on the register—their names, neon illuminated. Beside the name plate is the signal light which is turned on and off to register the doctor in and out. Thus, visitors learn at a glance if their doctor is in the hospital, or doctors desiring a consultation may discern immediately which staff member is available.

Messages for a doctor are slipped into a diagonal slot opposite his name—small cards, thus inserted, announce staff meetings or clinics. Original cost of this directory register is moderate, one learns, and the operation and upkeep cost low.

## Posters for Hospital Day

Does your reminder list suggest Hospital Day posters for distribution in your community? Physicians' Record Co., 161 West Harrison Street, Chicago, reports that a poster ("the finest we have so far produced") is just off the press. This year it portrays Florence Nightingale, who invites the public to visit your hospital. The drawing, which has been printed in rich colors, is by Howard Cox. This company, by the way, has a wide line of publicity material for National Hospital Day.

## Sound System for Music and Cheer

And for doctors' paging and for delivering special announcements, too. But we are ahead of our story. Western Electric's new sound system distributes programs from microphones, radio receivers or phonograph records and is wholly operated from a single cabinet. In the cabinet are centered all controls, switching arrangements, radio receiver, electric phonograph, amplifying equipment and a combination loud-speaker and microphone device. A "talk-

back" feature enables doctors to talk with the main office over the nearest loud-speaker extension. That is, sound not only may be sent out for reproduction over distant loud-speakers but the same loud-speakers may in turn be used as microphones for picking up sound which is transmitted back to the central point. Western Electric delegates Graybar Electric, Graybar Building, New York City, to supply further details.

## Facts For Air Conditioning Fans

A flash from the air conditioning field reminds us that improvements in design and mechanical precision are coming thick and fast from manufacturers of this equipment. To handle the variable load requirements of spring, summer and fall weather, Baker Ice Machine Co., Inc., 1517 Evans Street, Omaha, Neb., has developed new dual mounted condensing units with capacities automatically controlled for high efficiency and low operating cost as well.

The assembly consists of two four-cylinder compressors using Freon or Methyl-Chloride refrigerant with motor and V-belt drive for each. Combined capacities range up to 60 h.p. with compressors graduated in size and fully automatic motor and temperature controls permitting three-stage capacity reduction on all models. A shell and tube type condenser-receiver with low resistance to water flow allows use of water cooling tower.

Other features include roller bearings on both thrust and blind ends of crankshaft to reduce power requirements and vibration.

## Paging New Literature!

*Spring and Screen Problems* — Even insects (flies, in particular) find life more and more complicated. For manufacturers are ever invading, with new and improved screens, that territory formerly claimed by the house fly. There's the Cinmanco, for instance, the all-metal tubular screen with rewireable feature. A new bulletin from Cincinnati Fly Screen Co., Cincinnati, says it is a neat screen, strong but light in weight, easy to operate in all kinds of weather. This company also makes the Zip-in frameless fly screen and advances for it these points: no painting; no repairs; no fitting—it is sized to fit all standard windows; easy to install, clean, store; inexpensive.

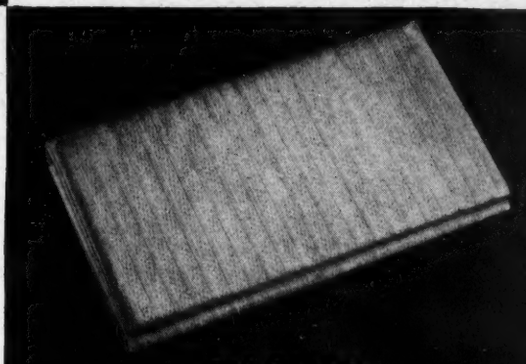
*Sterilization a Full-Sized Problem* — Such is apparently the conviction of American Sterilizer Co., Erie, Pa., for they have just issued a booklet destined to be of interest to hospital architects, consultants, engineers and hospital executives generally. Reported to be the first of its kind, it covers the selection, arrangement and installation of sterilizers. Various sections deal with Built-in Arrangements of Sterilizers; Utility Room Sterilizing Equipment; Methods of Heating Sterilizers, and Sanitary Protection of Sterilizer Connections. There are also outline drawings showing over-all dimensions for various sterilizers and combination groups of sterilizers.

*Research Closes in on Sutures* — Do nurses want to know about sutures? That is, do they want to study a suture's history, its manufacture, details of its inspection in producers' laboratories? Nurses do, apparently, and Lewis Mfg. Co., Walpole, Mass., supplies for their study a new and attractive "Textbook on Sutures." It includes definitions of suture terms; details of suture manufacture; suggestions on operating room preparation of catgut; details of nonabsorbable sutures. The last pages treat,

# Direct to You from World Wide Markets To Meet Hospital Needs and Budgets

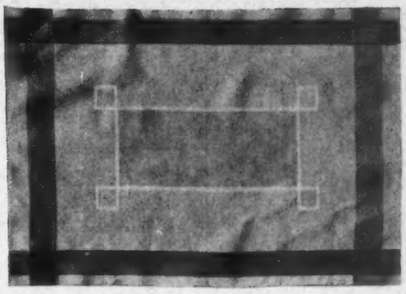
### Damasks

Practical, serviceable selection—pure linen, cotton—imported and domestic. Bolt goods, hemmed cloths and napkins . . Especially chosen for hospital service. Grades and prices for all requirements. » » »



### Bed Spreads

Here is another White Knight triumph. Similar to imported Pique but much lower in price. You can shop the country over and you will not find another spread to compare with this strongly woven, durable and exclusive White Knight Spread. It has everything — wearing quality, appearance, price! White, Green, Autumn Rose and Sand . . . In lots of 100, name or crest woven at slight additional cost. . . .

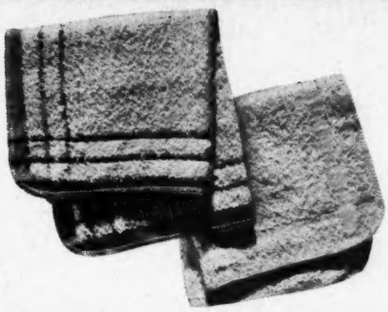


### Tray Covers and Lap Napkins

**One of the items that called early attention to the White Knight Line and has continued to attract hospital buyers all over the country. An excellent imported American and Egyptian cotton tray cloth or lap napkin with a colored border (Green or Gold) on a light ground. It is absolutely lintless. Launders well. Always looks attractive. 17 x 23 in. In quantities of 100 dozen furnished crested or with name at no extra charge.**

### Dresser Scarfs

The scarf illustrated matches the tray cover illustrated above at right. Imported American and Egyptian cotton. Lintless. 17 x 45. We also offer a choice group of yard goods at moderate prices.



### Wash Cloths that Save You Money

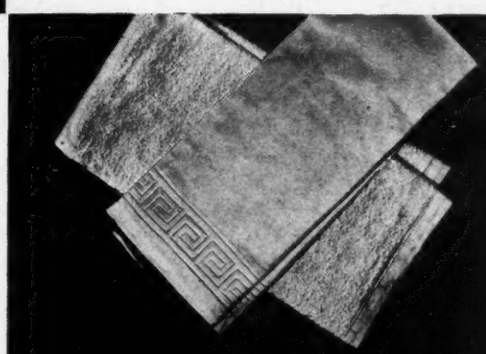
**You may pay a few cents more per dozen for these fine, full bodied, double twisted yarn Wash Cloths, but they will out wear, give more satisfaction and actually cost you less than "cheap" cloths that almost disappear the first time they are washed. Soft, fluffy, absorbent. Try a few dozen. L-531 — White, full 12 x 12 in. L-531-A—Colored border. 11½ x 11½ in.**

### Juvenile Drapes

Our own design and pattern. A new departure in draperies introduced just a few months ago and immediately popular. Red and Green figures make lively pattern against Egg Shell background. Colors absolutely sun and tub fast. Good quality, preshrunk percale. In figuring for drapes or crib or bed spreads, no allowance necessary for shrinkage. (In 25 yard lengths or more any two color combination may be ordered.)

### Toweling by the Bolt

For whatever purpose, to meet any need and to fall within budget requirements, White Knight Toweling by the bolt offers hospitals most for the money. All good values and guaranteed to be exactly as represented. When you know the quality the price is very attractive. » »



### Towels

Two outstanding Values . . . Our Terry towels are substantial weight, heavy double twisted yarn. Will remain soft and fluffy after washing . . . Huck Towels. Grecian Key Border. Exclusively our design. Double thread construction with fine finish and long wearing qualities.

### Blankets

**Because blanket buyers are often confused by the terms used in describing blankets — "All wool", "All wool filled," "All virgin wool", "40% wool"! — it is a safe policy and good judgment to buy blankets only from a reputable house that has the experience and the will to recommend the *kind* of blankets you need.**

***White Knight Blankets are especially selected for hospital needs.***

# ROSS, Inc.

## Wholesale Hospital Supplies, Milwaukee, Wisconsin

White Knight
MILL ROSS, INC. MILWAUKEE, WIS.
LINENS

briefly, of Curity sutures but, says the author, "We promise to keep all 'advertising' out of even this material, and give an informative review of points concerning Curity catgut that will interest any present or prospective user of it."

*More Sidelights on Sutures* — And here is another aid to suture knowledge, a new motion picture, "Suture Technic," recently released by Davis & Geck, Inc., 217 Duffield St., Brooklyn, N. Y. Edited from the point of view of the surgical nurse or instructor in surgical technique, the film shows accepted methods for preparing and handling sutures of both the boilable and nonboilable varieties. One reel, it requires fifteen minutes running time. By the way, a new D & G Library of Surgical Motion Pictures is at hand, describing other films available without charge to medical schools, hospitals and other professional organizations. All films are of the safety (noninflammable) type.

*Thoughts on Steam Traps* — From Three Rivers, Mich., come two booklets. One describes steam traps, the other, air traps — both the products of Armstrong Machine Works. It's thought provoking, this material, because it takes concentration to figure out the intricacies of traps. For institutions, there is the No. 21 air trap which is applicable to hospitals using hot water for heat. In the steam trap booklet, the automatic air by-pass is featured. The Armstrong trap with this automatic air by-pass, says the manufacturer, gives service comparable with thermostatic traps on hospital sterilizers.

*Paint Goes to Work* — Yes, that superb modernizer, paint, works hard in the spring season, as well as in all seasons. New literature at hand, suggests how we can be paint-wise. There is, for instance, "Glorified Light," from Pittsburgh Plate Glass Co., Pittsburgh. This booklet stresses that the "new science of seeing" is furthered by proper painting, for the degree of gloss and texture of painted surface affects the amount and distribution of reflected light. Also, the color of painted surfaces determines the volume of reflected light — for instance, white has nearly ten times the light reflectivity of dark gray. For ease of seeing, light must be thoroughly diffused or broken up — paints comparatively low in gloss are thought more effective in diffusing light than those with high gloss. The booklet describes particular paints as the "Snolite System," interior finish for use under normal exposures and the "Snotex System," interior paint which resists fumes, gases or heat.

The *Dutch Boy Painter* offers practical suggestions on such subjects as Stencils and Mask Treatments, Painting Window Shades, or Removing Paint from Plaster. Another leaflet is the *Dutch Boy Quarterly*. This discusses "A Flat Paint That Can Take It."

If you would concentrate on a rapid painting job resulting in reduced labor costs, study a sheet lauding Barreled Sunlight flat wall finish, said to spread easily and cover the surface adequately, with a minimum of paint. There is also a Barreled Sunlight partial gloss wall finish for walls where washability is necessary but full gloss not desired.

Then, there's a booklet, "Painting and Decorating the Modern Hospital," from Sherwin-Williams Co., Cleveland, issued sometime ago but mentioned because it is pertinent. This treats of Color, Painting Problems in general and Furniture Refinishing. A new "Tinting and Mixing Guide" (Eagle-Picher Lead Co., Cincinnati), advises on paints, their colors and the quantities to use. Finally, a leaflet from Hockaday, Inc., Chicago, warns against using porous paints as these shelter bacteria in crevices that soap and water cannot reach. Hockaday offers a washable wall paint said to withstand the ravages of repeated washings.